

# Manufacturers Record

Reg. U. S. Pat. Office

EXPONENT OF AMERICA

Devoted to the Upbuilding of the Nation Through the Development  
of the South and Southwest as the Nation's Greatest Material Asset

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## The Protective-Productive Power of Life Insurance

THOUGH the American people are now carrying \$100,000,000,000 of life insurance, it is far below the maximum amount that should be carried, when considered from the viewpoint of the good of humanity. Many years ago, when life insurance was first advocated, there was a distinct opposition on the part of some supposedly religious people who regarded it as a direct flying in the face of Providence, on the ground that they must make no provision of this kind for the welfare of their families, but leave them to the care of the Almighty. What a travesty on religion! In these days, men who do not carry insurance to the extent of their ability to care for their families are indeed flying in the face of Providence.

There is an old saying, quite applicable to this situation, that the two greatest things which every man must of necessity face in this world are: To safeguard his future through all eternity through which the soul must live; and, to the utmost extent of his ability while he is living, safeguard his family against desperate poverty and want, and dependence upon relatives or the poorhouse. These two outstanding facts ought to be always in the mind of every thoughtful person; yet it has been wisely said that it requires the utmost work of ministers to arouse humanity to prepare for that other world to which all men are hastening, and it requires the utmost exertion of the insurance agent to make men see the importance of providing for their families when the breadwinner has been taken away.

It matters not what wealth a man may appear to have, nor how prosperous his business may seem to be; when he is suddenly stricken down his business may go to pieces, or his supposed fortune melt away. Insurance comes, if it has been provided in advance, at that particular moment to meet some of the problems that face those left behind. The editor of this paper has often said that he has counted as a friend every agent that ever called upon him in behalf of insurance.

Moreover, in these days insurance matters have been so adjusted that arrangements can be made for the insurance payments to be paid monthly or quarterly through a long period of years, or through the life of the beneficiary, and thus all danger of loss be eliminated.

There are other forms of life insurance, such as annuities, and there is group insurance which is coming rapidly to the front. There is insurance of partnerships and of close corporations by which, on the death of a partner, or a stockholder in a close corporation, money is immediately provided through insurance to pay for the partner's interest or to pay for the stock which a stockholder's family might have found it very difficult to dispose of otherwise.

Insurance is thus spreading as one of the great social betterment movements of the world. The \$100,000,000,000 that is now being carried by American people will grow, in

our opinion, far more rapidly in the future than it has in the past. It combines insurance and savings and many other features of thrift in a gigantic plan for the good of all.

Last year more than \$2,057,000,000 was paid to policyholders and beneficiaries in the United States and Canada; \$421,000,000 of these payments went into the Southern states. The physical misery and the anxiety of dependents that these insurance payments alleviated cannot be measured in billions of dollars.

Furthermore, medical examination for life insurance has been the means of prolonging thousands of lives by uncovering symptoms which, if neglected, would have resulted seriously; similar results have been obtained by the health research work carried on by the insurance companies.

In addition, the assets of life insurance companies, now estimated at \$17,000,000,000, have become one of the great factors in the investment and real estate mortgage field. The significance of this is better understood when one realizes that life insurance companies have invested as the policyholders legal reserve fund \$17,000,000,000 to guarantee the payment of \$100,000,000,000 of liabilities, representing the protection of 68,000,000 people and 20,000,000 homes. One company, with assets of about \$3,000,000,000, invests in each year about double the amount of the annual increase in assets, which indicates the part that life insurance is playing in supplying capital needs. That the South is sharing in this flood of liquid capital was shown by the MANUFACTURERS RECORD about a year ago when it compiled some figures on the extent of investments in the South by ten of the larger life insurance companies of the country. At that time these ten companies had so invested more than \$1,670,000,000. Of this amount \$829,000,000 was in mortgage loans, with \$841,000,000 invested in Southern railroad, public utility, state, county and municipal bonds. No such comparison has been made for the life insurance companies as a whole, nor for the companies located in the Southern states, but it is indicated by what one Southern company reports that the Southern life insurance industry is contributing as its part in the development of the South. Emphasizing the importance of this we quote the following from one who has had 20 years' experience in the investment banking business:

"The thing that is outstanding in my mind is the drain on the vitality of any business or community caused by the payment of interest. It is bad enough when the interest is paid for money furnished by other sections of the country, but when our own people in the South and Southwest not only borrow and pay interest but borrow and pay interest on money that they could have kept at home, the necessity of education on the point appears to be very strong."

As the MANUFACTURERS RECORD has repeatedly stressed, it is of the very greatest importance from every standpoint that great insurance companies should be developed more and more in the South. These organizations gather in billions of

dollars which must seek re-investment in safe securities and which help to build up local prosperity. Much of New York's vast wealth and domination of the financial interests of the country has come about through the enormous sums controlled by the insurance companies located there. Moreover, the cities of Hartford, Springfield, Milwaukee, Cincinnati, and many other communities have been greatly benefited financially by their strong insurance companies.

It is gratifying, therefore, that in the South there is being developed a large number of strong insurance companies which have been making much progress of recent years. Some of these companies have been doing a large business and steadily expanding their work. Southern life insurance companies now have in force approximately \$7,000,000,000 of insurance, and more life insurance is written and in force in the South than was reported for the entire United States in 1910. Every well managed, safely guarded insurance company in the South is a distinct asset to this section and steadily advances its prosperity. While Eastern and Western insurance companies invest largely in Southern securities, the interest on these securities or on the mortgages held goes to the East or to the West; but when the South is able to invest in its own securities the interest remains at home to further fructify and fertilize the prosperity of every business interest.

A recent editorial in the MANUFACTURERS RECORD, calling attention to the fact that insurance in the United States had reached \$100,000,000,000, has brought forth a number of interesting letters from insurance companies in the South. One of these is from Graham Dowdell, president of the Alamo Life Insurance Company of San Antonio, Texas. Mr. Dowdell writes:

"The editorial in your issue of September 19 on the first hundred billion of life insurance is interesting not only for what it expresses but also for what it suggests.

"The economic value to the South of its own insurance companies cannot be reflected adequately in the scope of such an editorial. It would be of great benefit, however, to the people of the Southern states if they could be impressed more thoroughly with the importance of financing their projects themselves. It must be apparent that contributions to the financial resources of other states by the payment of premiums and interest on policy loans add nothing to the accumulated wealth of the states so contributing. Economic independence is obviously obstructed by such a course. The amount of premiums paid by people of the Southern states to insurance companies located elsewhere is enormous and its volume continually increases. Then, in many cases, they proceed to borrow the money so paid and pay interest for the privilege of using resources that belong to them. Why should it be? Nowhere is there any monopoly of ability to organize and manage life insurance companies successfully. Contracts of life insurance can be made anywhere. The commodity, if it can be so-called, has no limitations as to volume or area of production. Transportation and labor facilities are not factors in production or distribution. Market values do not fluctuate. Business intercourse with a company located in one's own state is more convenient than with one remotely situated. There seems to be every reason why the people of the South should build their own life insurance facilities. A proper appreciation of these facts will be a forward step toward economic independence.

"This company is one of 13 Texas companies, which have been carrying on, for two years, a co-operative, institutional advertising campaign for the purpose of educating our own people to the importance, not only of providing themselves with insurance, but also, in the process of doing so, of building up the companies of their own state."

Bart Lelper, manager, publicity and advertising of the

Pilot Insurance Company, Greensboro, N. C., in commending the editorial mentioned says:

"It is a coincidence that one of the South's home companies, the Pilot Life, should have reached the \$100,000,000 mark of insurance in force just at the time the total insurance in force in this nation crossed the hundred-billion line.

"While the whole of this excellent article struck a most responsive cord, we were particularly impressed with the common-sense principle brought forth toward the close of the editorial, as you made it clear that the building up within the South of its own home insurance will build up great financial centers and create a power for the South's own prosperity."

In another letter of commendation to the MANUFACTURERS RECORD, Seneca M. Gamble, sales promotion manager of the Southern States Life Insurance Company, Atlanta, reminds us that "only 7 per cent of American life value is protected by life insurance, whereas 87 per cent of the value of burnable property is safeguarded by fire insurance. The contrast is more impressive as we realize that while any fire insurance policy may produce a claim, every life insurance policy which is kept in force must produce a claim." Further:

"With \$100,000,000,000 representing only 7 per cent of the life value, we see that full protection would show insurance in force in the amount of \$1,428,571,428,500. This figure is worse than staggering and entirely beyond the mental grasp of most of us. Surely it does not give room for any belief that life insurance can reach within generations yet to come a point of saturation. The truth of this statement is emphasized as we consider the constant increase in life value because of economic progress.

"The awakening of the South is no myth. It has, however, in reality just begun, as compared with our resources and our opportunities. I do not believe I am unduly prejudiced in favor of my native section in feeling that we are above any division of any land the best favored with 'raw material' which we can convert, through greater awakening and broader activity, into a more lasting gigantic success than has ever been accomplished anywhere in the history of the universe. I just wonder how long some of us will continue to slumber alongside our limitless opportunities."

## THE KEEPLAWS: A LEAGUE TO REDUCE CRIMINALITY

WHEN President Hoover appealed to the country for a stricter observance of the law, he inspired Mrs. Mary Bennett Little of Wadesboro, N. C., to conceive and launch what she calls the Keeplaws League, an organization primarily for children but with an adult auxiliary. The league is dedicated to an effort to teach children to obey the laws, the underlying philosophy being that adults are hard to influence but that if children are taught respect for and obedience to laws, they will carry that teaching into their manhood and womanhood, and there will be less criminality in future.

The American War Mothers, of which Mrs. Little is an officer, are the active promoters of the league. The plan has been formally endorsed by the Governors of North Carolina, Arkansas, New Mexico, Idaho and the Lieutenant Governor of Connecticut; state superintendents of public instruction of Utah, Montana, Nebraska, North Carolina and others; by many posts of the American Legion and Auxiliary D. A. R. and U. D. C. Chapters; school superintendents and teachers; prominent officials of various kinds, including Sanford Bates, Commissioner of Corrections for Massachusetts; Supreme Court judges; lawyers and well-known clergymen and private citizens who are enthusiastic as to the plan and interested to see it put into immediate operation.

No thoughtful person will question the menace of the growing lawlessness of the country, and if the Keeplaws can inculcate a sufficient respect for law to alter or reverse this trend, it will prove to be a great constructive force.



## Radical Change in World Finance Based on Gold an Absolute Necessity

THE world's business has been enormously expanding. The world's indebtedness has been enormously increased not only by the World War, but by the unexampled bond issues placed in this and other countries for improvements of one kind and another. The world's finances are based on gold, and yet the gold production of the world is by no means keeping pace with the enormous increase in world needs.

The average world production of gold for eight years, from 1906 to 1913 inclusive, was \$489,000,000. Since then there has been an actual falling off, until in 1927 the world's output of gold was only \$400,987,000, or \$70,000,000 less than in 1915 and \$89,000,000 less than the average for the eight years ending with 1913.

In the meantime the production of gold in the United States, which for eight years ending with 1913 averaged \$92,740,000, has steadily declined, until in 1928 it was only \$46,165,000, a decrease of over 50 per cent as compared with the eight year period, and a still heavier decrease compared with 1915 when our production of gold amounted to \$101,036,000.

The figures as to the gold production of the United States and Alaska since 1914, and for the world during the same period, are as follows:

	Value of Gold Produced in United States and Alaska.	Value of World's Gold Output.
1914 .....	\$94,532,000	\$440,348,027
1915 .....	101,036,000	470,026,251
1916 .....	92,590,000	455,423,136
1917 .....	83,751,000	420,579,351
1918 .....	68,647,000	384,786,306
1919 .....	60,333,000	365,853,933
1920 .....	51,187,000	332,823,934
1921 .....	50,067,300	330,231,792
1922 .....	48,849,000	319,420,063
1923 .....	51,734,000	366,940,884
1924 .....	52,277,000	393,405,000
1925 .....	49,860,000	393,301,000
1926 .....	48,269,000	399,981,000
1927 .....	45,418,000	400,987,000
1928 .....	46,165,000	.....

These figures must be taken into account with the average for the eight years ending with 1913 of \$489,000,000, and the fact that as far back as in 1906 the gold output for the world was \$400,000,000. The great financial interests of this country may try to belittle this situation, they may want to hold a still greater power over finance than they now have, desperately great as that is when considered with regard to the world's welfare; but that a radical change in world finance is an absolute necessity cannot admit of any question by honest-minded people entirely free from the domination of the narrow-minded financial interests that think only in terms of money and not in terms of human welfare.

Some striking comments on the present situation recently appeared in the London Statist, regarded as perhaps the world's leading and most conservative financial publication. Comments from that publication quoted in Barron's Weekly of October 21—and as our readers know, Barron's is one of the publications of the Wall Street Journal combination—are extremely suggestive of what people in Europe are beginning to think. Referring to the recent advance in discount rates by the Bank of England, the London Statist said:

"It (Bank of England) saw that America was not 'playing the game' demanded by the normal functioning of the international gold standard. In their attack upon the supposed evils of stock speculation, the Federal Reserve authorities were

creating artificially stringent credit conditions in the United States, and were effectively sterilizing any gold that was arriving in that country. \* \* \* The Bank of England rightly considered itself to be protecting the interests of Europe against those of the United States in resisting for as long as was feasible the pressure on sterling exchange." \* \* \*

"The circumstances which forced the Bank of England to impose what is virtually a panic rate when every index in the domestic situation calls for easier credit conditions is a damning commentary on that intelligent co-operation between central banks which is supposed to be taking place and which should render the gold standard an effective and equitable basis of world values. The co-operation of this kind that has taken place hitherto has failed dismally, and if it continues to make so poor a showing, if the problem of the future values of gold continues to be treated with that rather supercilious detachment which it has received in recent years from central banking executives, the day will indeed be brought much nearer on which an impatient and exasperated Europe will relegate the gold standard 'to the relics of a barbarous age.'"

The closing sentence of this statement is worthy of very thoughtful consideration, coming from a paper of the standing and conservatism of the Statist, when it suggests "the day will indeed be brought much nearer on which an impatient and exasperated Europe will relegate the gold standard 'to the relics of a barbarous age.'" (Black type ours.)

To come from such a paper in what has been the world's financial center it is a startling statement. Its importance must be heeded, for the world cannot, and we say advisedly will not go on under present conditions with gold as the standard of values steadily decreasing in output; falling in this country, for instance, from \$101,000,000 in 1915 to \$46,000,000 last year, with practically every year showing a steady decline.

What is the solution? The problem is one to which the ablest economists of the world must give attention, and not leave it to the so-called financial leaders of New York, who are not safe guides for the country merely because they happen to be at the head of great financial institutions. The power to make money does not at all mean that the individual money-maker is a financier, able to guide the world's financial interests.

It will be noted in the table as given that out of a total production of about \$400,000,000 a year, the United States is producing only about \$45,000,000 a year, and in that respect we are placed at a serious disadvantage with the British Empire. A student of the subject in a letter to the MANUFACTURERS RECORD says:

"The bounty in my opinion should take the form of Federal aid to states granting bounties for production in such states, rather than placing the whole cost on the Federal Government."

That, however, we think is an entirely erroneous view. The suggestion of a bounty or a premium on all gold mined in this country has no relation whatever to the individual prosperity of the states in which the gold would be mined, and increased gold production is for the good of the entire country and bears no relation whatever, we think, to individual states.

A suggestion has been made that all gold mined should be commandeered and used for money purposes, and none of it be permitted to go into the arts. That is one suggestion that is probably hardly feasible.

## AMERICA BEHIND THE WORLD IN FORESTRY CULTIVATION

PRESIDENT HOOVER some days ago was told by George D. Pratt that the Federal Government appropriates only \$100,000 for fire protection in its extensive national forest areas, while fires in national forests during the first 10 months of this year did over \$3,000,000 in damage and cost \$2,750,000 to suppress. In our attitude toward our forests we who are so fond of calling ourselves the most progressive of all nations, are in reality one of the most backward.

Why should this be? It is hard to say, for innumerable industries and hundreds of thousands of families are directly dependent upon the lumber and forest products industries; many of our states draw revenue from taxable forests, and every one of us who buys or builds a house, or buys lumber, furniture or other wood products, feels the weight of forest decimation in the price he pays. Furthermore, we all know that most of our states draw large revenues from taxable forests; we know that most of the countries of Europe are far ahead of us in the scientific cultivation of forests, and we know of the desolation and degradation that have been due in part to their destruction in India and China.

Knowing all these things, why don't we put them together and act upon them with the vigor and efficiency with which we do other great jobs? Some of our states have progressive forestry departments. The New England states and Louisiana are leaders—but they were forced to it by almost complete denudation of their former great forest areas, Louisiana, for example, having 3,600,090 acres of forest land and 13,600,000 acres of cut-over and unproductive land out of its former 22,000,000 acres of virgin forests. Other states are following these, with stupid, blundering slowness. Yet we have in this country several live, vigorous organizations ceaselessly working for the protection of forests, and surely every legislator in the land has heard from many sources of the need for perpetuation of our forests.

Why don't we wake up? Why don't the people demand, and our legislatures give us the aggressive, well-trained, well-equipped and adequately financed forestry departments that we need? Why don't our state legislatures revise the archaic tax laws that in so many states still make it almost if not quite impossible to cultivate forests profitably?

True, some of our states are making headway. At least, they aren't all equally backward. It is some consolation that we can measure our backwardness in this particular in degrees, and some states can "point with pride" to the evidence of their progress as compared with their neighbors. But lest those states feel too chesty, let us see how we as a nation compare in this particular with some foreign countries.

According to Frank D. Kriebs in the United States Daily, 38 state nurseries in this country in 1928 produced about 50,000,000 seedlings for reforestation. Germany, with less area than the State of Texas, planted 180,000,000 hardwood trees and more than a billion pine and fir trees, more than 23 times as many as our 38 state nurseries.

During the same period Japan planted 250,000,000 trees, or 5 times as many as we did.

For 75 years the French government has maintained a great pine forest on land formerly a barren waste of sand, and from it harvests annual crops of naval stores and pine timber, while a prosperous and contented populace lives in the well-built, permanent villages that correspond to the wretched turpentine camps of our own pine forests.

We annually import vast quantities of lumber and wood pulp, largely from countries that have been more provident and far-sighted than we in the cultivation of their forests.

Why don't we come to life, revise our costly forest tax

laws, provide adequate funds for our forestry departments, and insure for all time an abundant supply of lumber and pulp wood? We have the land. We have the means. We have the scientific knowledge and the incentive. All we lack is the universal interest necessary to create the universal demand.

## FURTHER INVESTIGATION SUGGESTED OF IODINE CONTENT OF SOUTHERN VEGETABLES

COURTENAY DEKALB, writing from Tucson, Arizona, to the MANUFACTURERS RECORD, says:

"You have started something of tremendous importance in your cover-page editorial accompanied by the article in the same issue, October 24, on the demonstration of the existence of high-iodine content in the soils and agricultural products of South Carolina. It would be extremely interesting if the South Carolina Commission would extend its researches until it might be possible to plot iso-iodine curves. That was done with reference to iso-chlorine curves by Massachusetts some years ago, and it developed that there was a gradation from a maximum close to the seashore, diminishing toward the Berkshire Mountains in the extreme western part of the state. That, of course, was wind-borne, and only an insignificant amount of iodine could be so carried. What a similar investigation would be expected to show for South Carolina would be to what extent the iodine was due to seaweed from the building out of the coastal plain, and to what extent it might be derived from minerals contained in the Piedmont uplift. In one case it would be confined to the coastal plain, whereas, if derived from minerals farther inland, it would augment the value of a far more extensive region."

Here is an interesting suggestion for further study and investigation not only by the South Carolina Health Commission, but by all similar commissions in the Southern states. It comes from a chemist and mining engineer of almost world-wide experience and investigation.

## GREAT POSSIBILITIES OF THE CERAMIC INDUSTRY IN THE SOUTH

A SOUTHERN representative of a Western ceramic company, writing to the MANUFACTURERS RECORD about its position on the tariff situation, says:

"I have at many times noticed your comments concerning the use of imported goods in the American market, and wish to call to your attention the importation of a particular product of inferior quality at, generally speaking, a higher price. Florida is using more than 40 per cent of foreign floor, wall and roofing tiles in what is termed 'the better residences.'"

"The consumer is almost invariably ignorant of the quality and price of these tiles, and in many cases their origin is unknown. Investigation will prove that certain architects, not necessarily the best, are forcing an inferior material on their American client who, of course, is making his wealth and home on American soil.

"This country has surpassed the world in the production of clay products, and the South is not lagging in this enterprise nor in the use thereof. No doubt, if this abuse were brought to the attention of the owners there would be a decided change.

"There is not a building in the United States that could not be substantially and beautifully constructed with none but American material. It seems nothing short of treason to so belittle the American producer, and, undoubtedly, a reflection on the architect's ability who cannot attain the acme of the aesthetic with the facilities at his door."



## A Suggested Protective Tariff Convention in Washington

FROM many leading business men throughout the South the MANUFACTURERS RECORD has received hearty approval of its suggestion of a tariff convention in Washington by leading business people of the South, agricultural commissioners and others, who realize the great importance of protective duties for the upbuilding of the South. This section has been so largely misrepresented in Congress by free traders, or those who have not the political courage to express their true protectionist convictions on the subject, that a great mass meeting in Washington of Southern men of affairs, farmers and others who see the need of a protective tariff to safeguard the prosperity of this section, could be made of immense advantage. It might perhaps influence even the free trade congressmen in Washington. It might cause them to see that the idol of free trade, which many Southern politicians have so long worshipped, has been dethroned and that the South is determined politically to fight for a representation in Congress of those who see this need of a protective tariff and have the courage and backbone to stand for such a policy.

A South Carolina business man writing a few days ago in regard to what he called a very powerful letter from Wade Stackhouse of Dillon, S. C., to Senator Smith, on the question of protection, said:

"Mr. Stackhouse's letter is of course unanswerable," and then after reviewing the extreme depression in parts of South Carolina, with which he is fully acquainted, he writes:

"One hundred years ago the British spread the propaganda

of free trade throughout the South; and there never was a finer piece of propaganda work done. These people actually believe that anything except free trade is immoral. Some of them think that murder is a minor crime compared with voting for a protective tariff. And they think this because the editors of their newspapers have been preaching that stuff at them. Unless there has been a marked change, recently, there is hardly an editor there who has ever been up in the industrial sections, or who knows anything about modern industry, and finance, and economics. This is positively criminal. I say criminal because it is criminal for men who have taken upon themselves the function of leadership to continue in ignorance and preach prejudice instead of truth. \* \* \* A year ago this country was the envy of the world. Today, after this Senate has spent a summer 'raising Hell,' the whole country is nervous and scared, which is one of the many reasons why there is lack of confidence in security values."

This situation would be tremendously helped by a mass meeting in Washington attended by some thousands of the leading business men of the South who would give voice to their convictions as to the importance of a protective tariff for this section, and who in this way might possibly appeal to the editors of the free trade Southern papers and to the free trade representatives in Congress. Will John H. Kirby, president of the Southern Tariff Association, or other men of his standing, call such a convention and press the matter so earnestly as to make sure of a large attendance?

The following letters which we are publishing from men of affairs in the South strikingly present the whole situation and the need of such a meeting.

### Urges a Mass Meeting in Washington to Voice the South's Need of a Protective Tariff

Lebanon Woolen Mills.

Lebanon, Tenn., November 1.

Editor *Manufacturers Record*:

I have read the cover-page editorial on the October 31 issue of the MANUFACTURERS RECORD with unusual interest, and I concur heartily in every paragraph, sentence and word of it. It appears to me that the politicians of the South are from 30 to 60 years behind the section which they are presumed to represent. They do not seem to have any appreciable understanding of the progress the South has made industrially, educationally, socially, and otherwise, and they are playing the same old political instruments and singing the same old political songs which were played and sung in a day we have outlived. They are still fighting the very things they have seen other sections of our country use to their great enrichment.

I would like to see such a great meeting in Washington as you suggest, for unless something is done to acquaint the leaders in our political life with the real needs of the South, and with the fact of its great progress, they will con-

tinue as the chief stumbling block to further advance, and I do not construe it as necessary, either, for any of these leaders to change their party politics to accommodate themselves to the conditions of this new day, with which they seem to be so unfamiliar. It is simply a question of their being both willing and able to interpret the new South and formulate their political programs in the light of the great progress this section has made.

Again I say, more power to your already mighty pen as you fight courageously on, both for the preservation of American ideals and for the advancement of the section to which you have already given such long and distinguished service.

J. E. EDGERTON, President.

[Mr. Edgerton was recently reelected for the 14th consecutive term to the presidency of the National Association of Manufacturers, which is the organized representative of American industry. His wide experience and intimate knowledge of conditions confronting the manufacturer both of the South and the nation at large enable him to weigh conservatively every question affecting the country's industrial welfare. His conclusion that the South's most urgent need is to make known to Congress in no uncertain tones its demand for tariff protection is sound, logical and unanswerable. —Editor *Manufacturers Record*.]

### Protests Action of Some Southern Senators and Representatives in Not Protecting South Against Destructive Foreign Competition

Willson & Toomer Fertilizer Co.

Jacksonville, Fla., November 1.

Editor *Manufacturers Record*:

I am heartily in accord with the sentiment expressed in your cover page editorial for October 31.

I am very much impressed with the necessity of a protective tariff on Southern products, being interested especially in protection on the green vegetables grown in Florida and the Gulf Coast states for winter consumption in the North, and we, the Southern planters, cannot hope to pay our expenses and make a profit in competition with Mexico and Cuba. Fortunately, our Florida senators, I think, are very much in sympathy and understand the situation thoroughly; but there are few other Southern Democratic senators who have been in accord with us outside of the two from Louisiana. It would seem to me they are standing very much in the light of the prosperity of the states they represent, and it is, indeed, hard for me to reconcile their position. I hold Mr. Kirby in very high esteem, and would be glad to attend a general mass meeting in Washington to add my protest to the

tactics of the Southern group of senators working in coalition with the Western so-called insurgent Republicans.

May I add one more word in closing; that is, my admiration for you and the splendid work you have done for this state, which is fast recovering from the many unfavorable comments made on it during the past year.

LORENZO A. WILSON.

### Southern Bankers and Business Men Must Wake Up to Needs of South

The J. M. Burgulères Co., Ltd.

New Orleans, November 4.

*Editor Manufacturers Record:*

I agree 100 per cent with the views expressed in your editorial, and outside of the good work now being done by our Louisiana senators, assisted by the Florida senators and one or two other senators from neighboring states, your views hold good in regard to Southern senators slaying their own section.

In my judgment, our bankers and business men are not taking enough interest in our local and national politics. Our beautiful part of the United States is not going to grow any bigger than the men responsible for its development, so we must all be big enough to elect Senators and Representatives that will back up the laws that have such a vital effect in the advancement and development of our rich agricultural and industrial possibilities.

E. A. BURGULÈRES.

### Our Suggestion Was for a Convention of Those Who Believe in a Protective Tariff for the South—Does Commissioner Mayo Believe in Protection for Florida Products?

The State of Florida

Department of Agriculture.

Tallahassee, November 4.

*Editor Manufacturers Record:*

I think I can appreciate your viewpoint, as I have read your editorials for many years, but it is a question in my mind as to whether it would be advisable to introduce another question that will inevitably divide the political organization with which I have always affiliated and thus increase the factional difference that already exists on other issues. A convention such as you suggest could not do otherwise than precipitate a heated discussion without hope of agreement. There are those whose political creed is just as unalterable as yours and just as diametrically opposite. The principle involved will continue to be a subject for controversy for many years, and I believe it best to allow the discussion to be made on the floor of Congress rather than make the effort to drive the measure over, as you suggest.

NATHAN MAYO, Commissioner.

### Georgia's Commissioner of Agriculture Enthusiastic for a Well Rounded Tariff

State of Georgia,

Department of Agriculture.

Atlanta, Ga., November 1.

*Editor Manufacturers Record:*

I enjoyed very much reading the cover page editorial of October 31 and think it is timely and splendid.

We are having a large tariff meeting in Savannah, sponsored particularly by the Southern Tariff Association. Our people need to be stirred and awakened and not to sit, as you suggest, supinely by and permit the situation to go on.

I am enclosing a letter written yesterday to the editor of the Minneapolis Tribune. This gives you my position on the matter and you can use it as you see fit.

EUGENE TALMADGE,  
Commissioner of Agriculture.

Mr. Talmadge's letter to the Minneapolis Tribune follows:

(Copy)

October 31, 1929

Mr. F. E. Murphy,

The Minneapolis Tribune,

Minneapolis, Minnesota.

My dear Mr. Murphy:—

Your letter of the 26th, enclosing editorial from the Tribune of October 12th, received.

I have just returned from a meeting of the Commissioners of Agriculture of the United States in Washington. You probably noticed a news item from the Associated Press where the Commissioners as a whole deplored the action of Congress in not immediately passing duties on raw products.

I happened to be the only Southerner on the Resolutions Committee. The tariff resolution was prepared by me. For a great many years the people of the South have been wrongfully taught in regard to the tariff. They have been led to believe that they should be against it. The Southern Congressmen are now doing all that they can to secure a tariff on cotton. There was imported into America last year over four hundred thousand bales of staple cotton, also some waste cotton and some shoddy cotton. A duty of seven cents per pound on cotton would eliminate the staple determinations at the ports and would also give the protection desired.

We are also favoring a duty of seven cents a pound on jute and burlap. Jute and burlap are made in India and are being imported to this country and are taking the place of two million bales of cotton.

We also favor a duty on all vegetable oils, especially those that come from the Philippine Islands. In connection with this we endorse Philippine independence. Should this fail, we endorse a policy of levying a tariff on the vegetable oils and other importations from the Philippines and returning it to the Philippine government. This is done at present on the tobacco tax.

I have outlined the special program of the Southern Commissioners.

This is also our program:

We know that we cannot ask for a tariff for one section alone. We favor

a tariff on any raw products that will help the farmers in any section of the United States.

Yours very truly,

EUGENE TALMADGE,  
Commissioner of Agriculture.

### Congressmen Playing Politics to Nation's Misfortune

Knight, Thompson & Turner.

Tampa, Fla., November 1.

*Editor Manufacturers Record:*

I approve of every word in your splendid editorial of October 31. The Senators from the South are acting like children in this matter. Senators like Borah, Brookhart, Nye, Norris, Shipstead, LaFollette, etc., do not express the views of the people of the South. We are conservative, not radical nor socialistic. All the Senators know that the President will veto any bill that does not contain the flexible provision for tariff adjustment, or that does contain the so-called debenture plan. So it is evident that the coalition between the Democrats of the Senate and the radical so-called Republicans of the West is for the express purpose of defeating the entire measure or framing such a one as the President will be compelled to veto; and that instead of treating the proposition upon its merits they are simply endeavoring to play politics, which is a most unfortunate thing for the nation.

PETER O. KNIGHT.

### The South Should Make Known Its Resources at a Mass Meeting in Washington

J. S. Grasty, Ph. D., Sc. D.,

Geological Engineer.

Charlottesville, Va., November 2.

*Editor Manufacturers Record:*

In a recent address in Richmond, Dr. Charles H. Herty, a famous chemist of New York and a former professor at two of our Southern universities said:

"If Virginia today knew the value of its supply of manganese, that knowledge alone would justify the cost of a five-year survey of its mineral resources. But Virginia does not know."

Indeed, if the people of the Southern states were as active as they ought to be in assembling and in disseminating accurate information regarding the mineral resources of their section, the rapidity of the enrichment of the nation would be positively astounding. Similarly this is true as to all the natural resources of every one of the Southern states.

If the people of the South knew and appraised the value of its resources they would know, as you have stated in your cover page editorial, that a protective tariff is absolutely essential to the South's well-rounded prosperity.

Hence I favor most heartily your suggestion that a meeting be held in Washington in the very near future in order to give voice to the urgent needs of the South as regards protection under the tariff.

J. S. GRASTY.



## A Plea for Protection for Cottonseed Interests of the South

Tariff Committee

Texas Cotton Seed Crushers' Association.

Dallas, Texas, November 4.

Editor *Manufacturers Record*:

Your editorial makes the situation clear. I cannot tell you how to arouse the business men of the South from their lethargy. I have attempted to interest the press here in my own city to some extent, but without avail. Any student of economics understands that if the South is to prosper, its industries must be protected. The Southern politician prefers to live by arraying class against class, rather than facing boldly the economic issues which confront us, and this, of course, involves the protective tariff. For instance, in my own industry, they say the cotton oil industry is in a trust, while it is a fact that bankers who have been financing crude cotton oil mills, almost without reservation, run away from such loans because of their past bad records and the general demoralized condition existing within the industry. We are being investigated by the Federal Trade Commission, the U. S. Department of Justice and the State Attorney General's Department.

By reason of the importation of foreign vegetable oils, cotton oil is extremely low in price. However, the farmer is now getting almost twice as much for his cottonseed as he did for the last five pre-war average years. This, of course, is due to the higher price of the by-products. The linters are bringing about 250, based on the price level of that period; cake and meal about double and hulls about 70 per cent higher, but oil, the major product, is bringing about 125. If oil were bringing the same relative price as the by-products are selling for, surely no farmer could complain at what he was receiving for his cottonseed.

If the rates asked for by the farm group were enacted and made effective against all imports, including the Philippine Islands, and even allowing them a preferential rate of 25 per cent, it would add \$40,000,000 to the value of our cottonseed crop; however, some of our Southern friends in Congress think there is a trust holding down the price of cottonseed and they claim that it would stultify their consciences to vote a tariff against the Philippine Islands. Undoubtedly they feel their obligation to this ward more than they do to the white and black farmers of the South. They do not seem to understand the difference in the cost of production in this country and abroad, or the difference between the cost of producing and crushing cottonseed in this country and of producing coconut oil in the Philippine Islands, or even palm and palm kernel oil in British West Africa.

I confess that the attitude of the Southern press on the whole question of tariff, from an economic point of view only, astounds me. It is a case of everybody's business being nobody's business and the representative in Congress who is elected to represent his great unorganized constituents and who should have the stamina, the character and courage to demand a square deal for this class, in failing to do his duty leaves

their interest unprotected; therefore, the whole South suffers economically.

I would like to see in Washington such a meeting as you mention, where all classes of business and agriculture might meet and arouse the nation, but I confess I am at a loss to know how to arouse sufficient interest to induce them to hold such a meeting, or to attend one if held.

The Southern Tariff Association has attempted to represent Southern industry, that great unorganized mass which usually has no representation, but the Association is now under senatorial investigation as being an "iniquitous lobby," I presume working for some selfish interest. Just what that interest is has not thus far been determined. It has been a beggar for funds with which to carry on its work.

At least two of our Southern senators have said in public interviews that if the people of the South would leave to them the question of looking after their interests in the pending tariff bill they would do so and that there was no reason for the activities of the Southern Tariff Association. It would seem that the time is ripe for these gentlemen to take care of Southern interests in the pending bill. As I see it, the Southern members of Congress refuse to do their duty toward their constituency and represent the activities of any organization working in this direction and brand it as an iniquitous lobby.

I assure you I shall be very glad to do anything I may in the direction suggested in your editorial.

ED. WOODALL, Chairman.

## Wants a Meeting If a Big Crowd Can Be Had

Texas Steel Company

Fort Worth, Texas, Nov. 4.

Editor *Manufacturers Record*:

I thank you for your favor of the 30th and for publication of my article in the *MANUFACTURERS RECORD*, and particularly for your complimentary reference to me and my good friend Jno. H. Kirby on your cover page. It is an honor to me or to any other man to have your approval and to have his name associated with that of Jno. H. Kirby, who is the best and greatest man I have ever known.

Your suggested convention in Washington of Southern industrial and farm leaders is fine if a representative convention can be held, which I doubt. If a convention of 10,000 of the millions in the South who are interested in tariff protection could be held in Washington it would no doubt make a great impression upon Congress and the country, but unfortunately such a meeting cannot be held.

Many interested people would be unable to attend for financial reasons, many others for business reasons, but the chief difficulty is that most people will not realize the importance of it, and most people are willing to let somebody else do this character of work. My experience in attending conventions of this character is that if you can get 200 or 300 people to attend, your convention has been a success: the number is usually around 50 or 100. A convention

of that number would not do any good and might do harm.

Enclosed I send you a copy of a letter from my friend Senator Connally and of my reply. I am not justified in authorizing the publication of Senator Connally's letter, but you can publish my reply if you think it worthy of space.

GEO. W. ARMSTRONG.

Mr. Armstrong's letter to Senator Connally follows:

Nov. 4, 1929.

Hon. Tom Connally,

Senate Bldg.,

Washington, D. C.

My dear Senator Connally:

I thank you for your letter of the 29th. The Washington report published in the Sunday News indicates that the coalition of Southern and Western senators will write the bill and will pass it during the present session. If this be true it gives the Democratic party an opportunity to redeem its tariff platform pledge, which I hope it will embrace. Mine is a clear case for protection under it.

I have long been an advocate, as you may know, of a political alliance between the South and West because of the identity of their economic interest. The majority of the people of these sections are producers and borrowers and they need cheap money and high prices and wages, whereas the Eastern section appears to be dominated by bankers and consumers who imagine that it is to their advantage to have cheap prices and wages and dear money, together with the control of the volume of it.

In my opinion it would be a fatal mistake for the leaders of the coalition to adopt a free trade program, which would inevitably mean cheap prices and wages and destroy the farmer's best market and perfect the banker's control of the prosperity of the country.

The tariff and the limitation of immigration together are responsible for such prosperity as we have had during the past eight years; but for them the wages of labor would have been deflated along with the products of the farmer, and but for them the disaster that followed in the wake of deflation would have been infinitely worse.

I am hoping that this tentative coalition of the South and West will be permanent, but this cannot be unless it is founded upon economic principles that are of benefit to the people of these sections. This coalition must stand for adequate protection to both agriculture and industry, and not for free trade for either; it must also stand for an adequate volume of money and credit, and against banker control of it; and it must stand for high prices and wages, and not for the cheap cost of living.

I am sure you know the Federal Reserve System is completely dominated by bankers and that it controls the volume of money and fixes the value thereof, in violation of the national Constitution. Designed for a banking system it has developed into a price regulating machine.

I am taking the liberty of sending copy of this letter to others, which I hope will be agreeable to you.

Your friend,

(Sgd) GEO. W. ARMSTRONG.

### Tariff Protection for Southern Products Absolutely Essential

Manatee County Growers Association.  
Bradenton, Fla., November 4.

*Editor Manufacturers Record:*

Your cover page editorial must of necessity prove of special interest to the farmers and business men of the South. I feel safe in saying that we of Florida had hoped the promised revision of the tariff would be drawn from a purely economic standpoint, to the exclusion of political expediency by any political party.

Tariff protection for Southern products is absolutely necessary to our existence; the bill now stands in the Senate, with most of our Southern senators allied with the so-called Progressive Republican senators so to change the bill as reported by the Senate Finance Committee as to either defeat it or make it so objectionable to the present administration that it would be vetoed and so create argument with which to capture votes in coming elections. We feel assured of the support of our Florida senators, Fletcher and Trammell, and honor them for recognizing that the ma-

terial welfare of our state is of greater importance than party gain through political intrigue.

H. T. BENNETT, Secy.-Treas.

### Florida State Chamber of Commerce Favors a Protective Tariff

Florida State Chamber of Commerce.  
Daytona Beach, Fla., November 4.

*Editor Manufacturers Record:*

I understand there is to be a meeting held in Washington shortly, called by the Tariff Association, under the direction of Mr. Kirby, at which meeting we propose to be represented. I understand the purpose will be to get behind the Democratic senators from the South and endeavor to work out a solution to this very unsatisfactory situation that has presented itself. We believe the Florida congressional delegation has been sufficiently interested to have a clear understanding of the situation and we believe further that we now have their active support and co-operation.

DAVID SHOLTZ, President.

### Niggardly Treatment of South in Tariff Protection Blamed Upon Southern Congressmen

Richmond, Va.

*Editor Manufacturers Record:*

The only way the cover page on the MANUFACTURERS RECORD of October 31 could be better would be to have two pages of the same thing. It is certainly very pleasing to note that some of our good Democrats of the South are standing out for what is so essential to our country, while it seems that our Southern Republicans are faltering.

Before the passage of the McKinley Bill the best cotton was selling at the ridiculous price of 4½¢ a pound. The Southerners were bankrupt and we who remember know this to be a fact. Southern representatives who are holding back on the present tariff bill, which our President so earnestly wishes passed, should be able to see their error. As the writer frequently has said, we cannot blame the North for sizing us up from the representation sent to Washington from several Southern states.

C. R. MCGAHEY.

## Comprehensive Program for Meeting of Mechanical Engineers

The technical program of the annual meeting of the American Society of Mechanical Engineers in New York, December 2-6, at the time of the National Power Show in the Grand Central Palace, which opens the week of December 2, provides many interesting sessions.

The Railroad Division, which might be termed a national meeting of railroad engineers, will have three sessions, two on December 5 and one on the afternoon of December 6. The morning session of December 6 will be given over to a joint meeting under the auspices of the Railroad and Oil and Gas Power Divisions.

The Hydraulic Division plans two sessions: one on the afternoon of December 2 and the other on the afternoon of December 3.

The Applied Mechanics Division is to have three sessions, two on December 2 and one on December 3.

Two sessions will be developed at the Materials Handling Division, both on December 3. In the afternoon the subject will be "Economics of Delivery Vehicles."

The industrial power group of the Power Division will have a session on the morning of December 4, while the central-station-power group will hold a session on the morning of December 5.

The Management Division is to hold sessions on the morning of December 4, and December 5. The December 4 ses-

sion will be given over to the management of service departments and the remarkable work done in this line by the Newport News Shipbuilding and Drydock Company.

Two outstanding papers on aeronautics will be presented on the morning of December 6. One will discuss developments in aircraft engines and the other the design of commercial airplanes.

The Textile Division will hold its session on Friday, December 6.

Among other sessions scheduled are those of the Machine Shop Practice Division, the Fuels Division and the Wood Industries Division.

### \$600,000 Roofing Plant Under Way at Savannah

Savannah, Ga.—Construction recently started on the \$600,000 roofing plant here for the Southern Building Products Corporation, a subsidiary of the Certain-teed Products Corporation, of New York and St. Louis. Contract for the plant was awarded a few weeks ago to the Artley Company, Savannah, the main buildings to consist of a dry felt storage warehouse, roofing factory and finished goods warehouse. Minor buildings will include a structure for can filling, laboratory, storeroom, machine shop, boiler house, pump and blower house, locker room and slate silos. Still

and tank equipment will consist of one tube still, five tank stills, kerosene tank, two asphalt tanks and a fuel oil storage tank. The factory building will be equipped with one continuous roofing machine, to consist of a Miller saturator, coating machine, Universal shingle cutter, automatic mandrels, looping systems and other equipment. Power will be purchased, except steam for heating purposes. Construction is under the supervision of W. G. Will, engineer of the Certain-teed Products Corporation.

### Commercial Forestry Conference

Under auspices of the Chamber of Commerce of the United States and leaders of the forest and associated industries, a Commercial Forestry Conference will be held December 4-5, at Charleston, W. Va. There will be 30 speakers, with intervals for general discussion. In a broad way the following topics outline the program: The Forest Situation in West Virginia; Value of Forests to West Virginia Interests; Handling and Growing of Forests; Wise Use of Forest Resources and Wood Products; Protecting Forests from Fire; Forest Taxation Problem.

### Hot Springs Hotel to Open

Hot Springs, Ark.—The New Kingsway Hotel, formerly The Eastman, is undergoing complete reconstruction and refurnishing and December 1 has been tentatively set for its formal opening.



## Bank Mergers and Bank Chains

AT the recent annual convention of the American Bankers Association, George W. Davison, president of the Central Hanover Bank and Trust Company, New York, spoke on "Banking Evolution in America." The address has since been published in pamphlet form and is being distributed by the bank. In an editorial in the MANUFACTURERS RECORD of October 10, "A New York Banker's Aggressive Stand Against Monopoly in Banking," we quoted extensively from Mr. Davison's protest against the movement to destroy individual banking interests, the keynote of which is to be found in the following extracts:

"I believe in bank mergers, up to the point where they are not restrictive of inter-bank competition and up to the point where independence can be retained and relations with customers do not become mechanical or stereotyped. I believe in branch banking in limited local areas where the closest kind of contact can be kept with the main office and, of much greater importance, where the main office has a close and exact knowledge of local business conditions and the local people.

"The development of the holding company for the ownership of bank stocks, even as an interim step toward a branch banking expansion which may be legalized, I believe to be a development without promise. Do we want to see banking so monopolized that a given section shall be visualized as a source of tribute only, with its industries and merchants not regarded as individuals and with remote control able to lay its heavy hand on local industry and trade?"

Mr. Davison's views on the point of group banking were somewhat contrary to those advocated before the Association by John W. Pole, Comptroller of the Currency. Comptroller Pole would have Congress make a study of the need of national banking legislation, with special reference to the possibility of permitting national banks to organize chain systems.

Further opinions on the subject of group banking and its probable effect on the nation's prosperity and development have been obtained by the MANUFACTURERS RECORD and are published in the following:

Former Governor E. C. Stokes of New Jersey, chairman of the board of the First-Mechanics National Bank of Trenton, wires:

"The unit banking system has been the source of America's great progress that has surpassed the records of history. The 26,000 individual banks in this country locally owned, locally controlled and locally directed, each knowing their community needs and which have enabled individuals to become successful manufacturers, merchants or professional men stand out in marked contrast to the centralized financial policy of Europe. In England there are

23 banks with thousands of branches and in France 19 banks with numerous branches and offices. We have no place in this country for foreign landlordism in our financial system. A bank in a little community knows the needs of that community and uses its resources for community development.

"The modern tendency through mergers, branch and chain banking, is contrary to the American financial system. It means the consolidation of our local resources in the large metropolitan centers and the creation of a large money trust dangerous in the extent of its power, and dangerous in the socialistic resentment that will arouse the indignation of the country. All gigantic enterprises sow the seeds of communism and give the demagogues a chance to arouse the passions of the masses. A money trust is more susceptible to attack than any other form of consolidation. Even the Federal Reserve System was divided into zones or districts in order to avoid the control of the money resources by one section. We have no place here in our republic for the branch or chain banking system of Europe. It means the arresting of individual enterprise through inability of the individual to seek help from the home or community bank. Keep the home fires burning is a good principle to be observed by our banking system."

Craig B. Hazelwood, vice-president of the First National Bank of Chicago, is not in sympathy with the attitude of general condemnation of all forms of group banking. In our request of October 25 it was said:

"We feel sure that you agree with us that it would create a critical situation in this country should the financial power be concentrated in the hands of a few bankers in New York or the East. We would be glad to have you wire your views."

To this Mr. Hazelwood under date of October 29, writes:

"As to the matter of banking control, which you speak of in your letter of October 25, I am quite willing to say that I think it would be best that activities in relation to group banking be centered around key banks in various parts of the country, such key banks handling the situation in the immediate territory with which they are most familiar. An alliance could then be formed as between these key banks, with the financial control and the power of direction placed in the hands of these bankers. The domination of the banking resources of the country by a few individuals, more particularly those who have not gone through the ranks of banking, might prove very detrimental.

"These are my personal views which I have gained as I have seen the developments that are taking place in the banking business today, and particularly the urge for better bank technique to produce better operating results and a larger measure of safety and liquidity. These desirable results can be obtained under the unit banking system, and I feel that the agitation that has been made will improve our situation considerably. I am of the further opinion, however, that these results are likely to be secured more quickly and surely with

the development of properly managed group banking operations."

Andrew J. Frame, dean of American bankers and chairman of the board of the Waukesha National Bank, Waukesha, Wis., in the course of a letter to the MANUFACTURERS RECORD calling attention to his letter of protest of September 6 to Comptroller Pole against the Comptroller's advocacy of group banking says:

"I call your attention to just one point. Europe, Canada and practically all progressive countries are under the domination of branch banking and practically five banks in each of the countries dominate the destiny of those nations. The United States has 70 per cent of the capitalization of the world's banking. The progress of those nations is not even secondary to that of the United States. We have the greatest progress the world has ever known. If that is the case, why should we adopt a world limitation or monopolization as against fairly liberal American freedom and progress? What more need I say?"

### Bids on \$1,000,000 Laboratory

Austin, Tex.—Bids will be opened November 23 by the board of regents of the University of Texas for erecting a \$1,000,000 chemical laboratory, 300 by 100 feet, 4 stories and basement, of reinforced concrete, brick, tile and structural steel, with tile roof, cement, tile and linoleum floors. Elevators and vaults will be installed. The following contractors are estimating: J. F. Johnston, Austin; L. E. Myers Co., Watson Co., Henger & Chambers Co., L. H. Lacy Co., Bellows-Maclay Construction Co., A. J. Rife Construction Co., Central Contracting Co., all of Dallas; McKenzie Construction Co., L. T. Wright & Co., Walsh & Burney Co., all San Antonio; Jos. E. Morgan, El Paso; Jas. T. Taylor and R. F. Ball Construction Co., both of Fort Worth, and J. E. Johnson Construction Co., Waco. Separate bids will be received on plumbing, heating and ventilating, while electric wiring will be included in the general contract. Herbert M. Greene, LaRoche & Dahl, Dallas, are the architects.

### 20-Story Building for Lawyers

Dallas, Tex.—Martin Weiss and associates are promoting plans for erecting an office building of from 15 to 20 stories for the use of Dallas attorneys, the structure to be located in proximity to the County Courthouse, the Criminal Courts building and the County Records building. Tentative sketches have been prepared by DeWitt & Washburn, local architects.

# North Carolina's Mining and Quarrying Industries Most Active in State's History

More Money Invested in Exploration and in New Plants

By H. J. BRYSON, State Geologist, Raleigh.

## Part I—Non-Metallic Minerals

During 1928 and for the first six months of 1929, the mining and quarrying industries in North Carolina were more active than in any like period in the history of the state. Probably more money was invested in exploratory work and in new plants than ever before. There were built and put into operation three feldspar grinding plants, one mica grinding plant, five mica recovery plants, one tile plant, one brick plant, one small asbestos grinding plant and one sand and gravel washing plant. All these produce non-metallic minerals and mineral products, the chief types for which North Carolina is known. The following is a résumé of the non-metallic mineral industry of the state; the mineral products will be discussed in a subse-

quent article in the MANUFACTURERS RECORD:

### Asbestos

In Ashe, Avery, Buncombe, Haywood, Jackson, Macon, Mitchell and Yancey counties, are numerous small isolated deposits of amphibole asbestos. However, in the past year or two examinations revealed deposits near Minneapolis, Avery County, and at Otto, Macon County, large enough to be of economic importance. Two small plants, with a combined production of 40 tons per day, were built, but due to competition and limited market neither plant has proved successful. The material, however, used especially in shingles, boiler and steam-pipe covering, composition flooring, asbestos pads, and paints, ranks with that produced in Georgia.

In spite of the apparent failure of these two plants, a third property, on which is found asbestos and fibrous enstatite, has been purchased by F. C. Worth of Chicago. A copy of the report on the property by Payne Jewett Burgess, consulting engineer, has been received at the office of the State Geologist for the files. The report was very favorable. Mr. Worth stated that it was his intention to erect a plant at an early date.

### Brick and Tile

Probably no other state has a greater variety of brick and tile clays and shales than North Carolina. There are four types of materials found here which are suitable for heavy clay products; the pre-Cambrian shales of Montgomery, Stanly, and Union counties; the Triassic shales of Chatham, Lee, Moore, Rockingham and Stokes counties; the sedimentary clays distributed throughout the state; and the sedimentary kaolins of Henderson and Buncombe counties. From these clays and shales several types of common and flashed face and buff face brick are manufactured. Tests recently made at State College show that brick produced in this state rank with or above any other produced in America. Brick manufactured from the pre-Cambrian shales are shipped to many parts of the world.

During 1928 a plant producing sewer pipe, drain tile, etc., was completed near Winston-Salem and began operations, utilizing the Triassic shales of Stokes County. A brick plant was built at Madison, Rockingham County, also using the Triassic shales.

In 1927, the last year for which statistics are available, there were 64 brick plants distributed in 41 of the 100 counties of the state which produced 249,559,000 common brick valued at \$2,335,059. The same year 43,064,000 face brick were produced, valued at \$695,500 and 70,276 tons of tile valued at \$798,752.

### Feldspar

Three feldspar plants were built and put into operation during the past year. Golding Sons Company, Trenton, N. J., erected a small "glass spar" grinding plant near Spruce Pine. The Feldspar Milling Company, Burnsville, N. C., the



Upper View—Feldspar Mill of Golding Sons Company, Near Spruce Pine  
Below—Method of Mining Brick Clays in the Sanford District



only feldspar company in the state financed by North Carolina capital, built a modern, completely electric driven feldspar grinding plant near Bowditch in Yancey County. The mill has two units, a glass spar unit and a pottery spar unit which have a combined capacity of 110 tons per 24-hour day. The Consolidated Feldspar Company, Trenton, N. J., erected a small feldspar grinding plant near Toecane, Mitchell County. These three mills add between 250 and 300 tons per 24-hour day to the grinding capacity of the mills in the state; they were built in North Carolina in order to be near the source of supply of crude spar. Other than these mills the Tennessee Mineral Products Company has a 150-ton grinding plant near Penland, Mitchell County. Goldings Sons Company also has grinding plants at Erwin, Tenn., which receive their supply of crude material from the Spruce Pine district.

In 1928 the production of feldspar in the Spruce Pine district reached a total of 105,560 long tons valued at \$630,042, the highest on record in the state. The district produces annually about 50 per cent of the feldspar produced in the United States. Increase in production is due to the large and accessible deposits, good transportation facilities, abundance of native white labor, and favorable climatic conditions.

#### Kaolin Clay

North Carolina has been for many years the leading producer of residual kaolin clay in the United States. At present the Harris Clay Company is operating six clay washing plants, all in the Spruce Pine district. During the past year this company purchased the plant of the Norman G. Smith Company at Spruce Pine. The Pollard Clay Company is operating a modern clay washing plant at Burnsville, N. C., while the General Mica & Clay Company is operating a combined clay and mica washing plant near Franklin, Macon County.

Probably the outstanding development in the clay washing industry in recent years is the erection of a Dorr-bowl classifier by the Norman G. Smith Company; it takes the place of the old sand wheels and settling troughs in use for so many years in the state. The new process is a complete success through the economy of labor and materials, also because of the better grade of finished product. The company also built in connection with the clay washing plant a mica recovery plant. Residual kaolins have an abundance of scrap muscovite mica associated with the clay. Until a few months ago the mica went to the waste dump or into the streams; now, from two to ten tons is recovered daily from the clay deposits. The price of

such mica varies from \$20 to \$100 per ton depending, of course, on the purity and fineness of the finished material. Since establishment of the mica recovery plants most of the small mica grinding plants have gone out of business. It is estimated that from \$5000 to \$20,000 worth of mica is recovered annually from each mica recovery plant.

#### Mica

Commercial deposits of mica have been worked in 15 of the western counties of North Carolina, it has been the leading producing state for many years and since 1903 has produced over half the mica mined in the United States. Peak of production was reached in 1917 due to high prices as well as to curtailment of imports during the war. Production decreased from \$577,341 in 1917 to \$117,589 in 1927, due entirely to foreign competition, especially from South Africa, France and India. It is said that foreign material can be delivered to the Spruce Pine district at a lower price than it can be mined locally. Unless a protective tariff is granted there is little hope for the mica producers.

Early in 1929 a large mica grinding plant was built by the Franklin Mineral Company near Franklin, Macon County. A secret process of grinding

was worked out by J. D. Davenport, president and manager of the company, who stated that he and other engineers had labored for nearly two years before the process was perfected.

#### Kyanite

Kyanite is one of the widely discussed minerals today due to its refractory qualities and its high alumina content. The color varies from white to blue, sometimes the center of the crystal blade is blue with white margins; rarely green, gray or black. It is transparent to translucent with a vitreous to pearly luster, and varies in different directions from 5 to 7 in the scale of hardness. Specific gravity varies from 3.56 to 3.67. The chemical composition,  $Al_2SiO_5$ , and other chemical blowpipe properties are similar to those of andalusite and sillimanite.

Kyanite has been found in many localities in the state, occurring in small lens-shaped masses of high grade material and in schists, the latter offering far greater commercial possibilities. Schists in Yancey County on the north end of the Black Mountain range are said to contain from 10 to 40 per cent kyanite. Accessory minerals are chiefly quartz, mica, and garnet with smaller



Upper View—Mica Grinding Plant of the Franklin Mineral Co. in Macon County  
Below—Mine of the Harris Clay Co. in Spruce Pine District

amounts of tourmaline, staurolite, and corundum.

Many of the uses of kyanite are questionable, as it is in a more or less advanced experimental stage, but there is a possible use in many different ceramic bodies, especially in the refractory materials. Experiments have been carried on with kyanite to determine its value in the following materials: spark plugs, refractory brick, porcelain ware, both electrical and china; sagger clays; in glass and enamel ware. In order to have a marketable product a process of concentration will have to be worked

out. Material from the property of J. A. Pollard, Burnsville, N. C., has been shipped to the Colorado School of Mines for experimental concentration work. Results so far have been satisfactory and if the final tests are favorable a concentrating plant will be built by a New York company. Little information is available for publication but if present plans work out it will mean a large development for the Burnsville district.

[Part II, on the mineral products of North Carolina, will appear in a subsequent issue of the MANUFACTURERS RECORD.]

## \$1,400,000 Hospital in Louisiana

Erected at a cost of approximately \$1,400,000, the new U. S. Veterans' Hospital at Camp Stafford, Alexandria, La., is nearing completion and will be dedicated soon. Buildings are of a modified type Louix XVI architecture, French Renaissance, adapted from the smaller palaces at Versailles. These include: Administration building, infirmary, neuro psychiatric building, dining hall, two tuberculosis buildings, infirmary for colored patients, storehouse, boiler house, nurses' quarters, residence of medical officer in charge, three officers' duplex quarters, apartment building, gate and transformer house and gates. Buildings to be erected in future will include a tuberculosis building, recreation building, attendants' quarters, colored attendants' quarters, garage and laundry. Capacity of the new hospital is about 420 beds and the professional staff will consist of 19 doctors. Major contracts were awarded as follows:

**Construction (general)**—N. P. Severin Company, Chicago, at \$1,027,675  
**Concrete chimney**—John V. Boland Construction Company, St. Louis, \$4,042  
**Electrical work**—Ray A. Phelps, Beloit, Wis., \$86,640  
**Elevators**—Washington branch of Otis Elevator Co., New York, \$32,276  
**Heating**—Redmon Heating Co., Louisville, Ky., \$86,800  
**Plumbing**—D. W. Chapman Co., Washington, D. C., \$120,896

**Refrigeration and ice making equipment**—Pyles Refrigeration Engineering Co., Baltimore, \$20,000

Principal subcontracts on the work:

**Brick and tile**—M. A. Floyd Construction Co., Chicago

**Cast stone**—Pyramid Stone Company, Houston, Tex.

**Concrete roads and walks**—Moore & Hudson, Pineville, La.

**Dumb waiter equipment**—Swezey Dumb-waiter Company, Chicago

**Elevator enclosures**—Variety Fire Door Co., Chicago

**Excavating**—Construction Engineering Co., Alexandria

**Floor hardener**—A. C. Horn Company, Houston

**Glass and glazing**—E. W. Ullrich Glass Co., New Orleans

**Lathing and plastering**—Hachmeister-Lind Co., Pittsburgh

**Linoleum**—Heminway Furniture Co., Alexandria

**Marble and slate**—Chicago branch of Vermont Marble Company, Proctor, Vt.

**Metal covered work**—A. C. Chesley Co., New York

**Metal partitions**—Fiat Metal Manufacturing Co., Chicago

**Metal shelving**—Van Dorn Iron Works Co., Cleveland, Ohio

**Millwork**—Victoria Lumber Co., Alexandria

**Miscellaneous and ornamental iron and steel**—Decatur Iron & Steel Co., Decatur, Ala.

**Painting**—Pearson-Regnell Co., Chicago

**Pressed metal frames and trim**—Kalman Steel Co., Chicago

**Roofing and sheet metal work**—Hinkle Bros. Co., Birmingham

**Rubber tile**—The Tile Shop, Inc., New Orleans

**Sand and gravel**—Gifford-Hill Co., Dallas

**Steel window equipment**—Chicago branch of David Lupton's Sons Co., Philadelphia

**Structural steel**—Rochester Bridge Co., Rochester, N. Y.

**Structural steel erection**—Alexandria Foundry Machine & Boiler Works, Alexandria

**Wrecking**—Price Ray, Louisville, Ky.

## Iodine Content in Southern Vegetables and Their Relation to Health

Dr. Charles H. Herty, the distinguished chemist, formerly president of the American Chemical Society, in a letter to the MANUFACTURERS RECORD, writes:

"I was delighted to note in the current issue of the MANUFACTURERS RECORD the space you have given to the question of the iodine content of the vegetables in South Carolina, and the possibilities of the same conditions in other Southern states. I think this is one of the most important problems before the South today. Of course, it must be determined upon facts, results from careful and thorough analytical work. I have recently been urging the Board of Trade in Savannah, and also the Commissioner of Agriculture in Atlanta, of the necessity of a prompt ascertainment of facts regarding the iodine content of Georgia fruits and vegetables.

"South Carolina has certainly been very enterprising in this matter, and deserves all sorts of credit for the way the matter has been handled.

"I am confident that this matter not only has great industrial significance to those sections where this high iodine content is found, but that it also means a blessing to people in the Middle West and Western states, through a decrease of goiter. I hope you will keep after the matter."

## To Develop Limestone Quarries

Austin, Tex.—The development of extensive limestone quarries near Cedar Park, 20 miles east of this city, has been undertaken by the Texas Quarries, Inc. The company is expending initially about \$100,000 for equipment at the quarries and \$250,000 for a finishing plant in Austin, where its main offices are located. Its production area is around 3000 acres, on which trackage and switching facilities are now being installed, a deep well being sunk and machinery being placed for two gang saws, seven planers and traveling cranes, two of the latter having already been placed for handling heavy stone and three others ready to be installed. There will also be two channel machines, quarters for 50 workmen and homes for executives. Four types of stone will be quarried, including Cordova cream, Cordova shellstone, Pebblebrook and Cedarbrook, the shellstone being a very attractive decorating stone, it is said, competing with Italian travertine. Officers of Texas Quarries, Inc., include W. H. Johnson, Bloomington, Ind., president, and R. E. St. John, Austin, general manager. Among its Texas directors are Carl A. Nelson and Tom E. Nelson, Round Rock, and C. N. Avery, Austin.



Main Group Building No. 2, U. S. Veterans Hospital, Alexandria



# World Trade Resumes Pre-War Rate of Growth

Germany's Exports Gain 50 Per Cent in Last Three Years — Export Figures of 91 Nations Analyzed by National Foreign Trade Council—Record Year for American Exports and Imports

RECORDING an increase of almost a billion dollars in the export trade of 1928 over that of 1927 at current money values, the fourth annual Armistice Day Accounting of International Trade, issued by the National Foreign Trade Council, New York, shows a steady growth of the world's exports and a rate of annual increase slightly greater than that prevailing before the war. The advance in the world's foreign trade since 1925 is fully 15 per cent, or an average annual increase of 5 per cent. Between 1900 and 1913 the aggregate growth of the world's exports was about 63 per cent, or slightly less than 5 per cent per year.

Latest figures for 91 nations whose trade represents 95 per cent of current international commerce, place the world's 1928 exports at \$32,914,000,000, equivalent to \$23,567,000,000 at the 1913 value of the dollar. This compares with 1913 exports for these same nations of \$20,055,000,000. They reached their pre-war level again for the first time in 1925 with exports of \$20,454,000,000, increased to \$21,025,000,000 in 1926 and to \$22,867,000,000 in 1927. All the Council's figures have been adjusted to the 1913 value of the dollar in order to provide a genuine comparison free from factors of inflation.

Restoration of the world to its pre-war rate of progress in export growth is largely due to the export trade development since 1925 of three nations—Germany, the United States and Canada. Within the past three years Germany has outstripped all other nations in the advance of her exports. In 1925 they were valued at \$1,414,000,000, reckoned at the 1913 valuation of the dollar. In 1928 they reached \$2,093,000,000, a gain of \$679,000,000, or almost 50 per cent. The increase of the United States in the past three years has also been notable,

mounting from \$3,147,000,000 in 1925, at the rate of the 1913 dollar, to \$3,663,000,000 in 1928, a gain of \$516,000,000 or about 17 per cent. Canada has increased her exports in this period by \$162,000,000, from \$819,000,000 to \$981,000,000, or about 18 per cent.

The most significant general increase in export trade during the year was that of the twelve nations of Western Europe. The aggregate export of these nations for 1928 was \$9,670,000,000. This was 98½ per cent of the export trade they carried on in 1913, using the strictly realistic comparison of the 1913 value of the dollar. Germany's rapid progress has brought her up to within 87 per cent of her 1913 real exports. Great Britain up to 95 per cent, and Belgium up to 86 per cent. All the other nations of Western Europe are doing more export trade than they did before the war with the exception of Holland whose change of method in computing statistics makes exact comparison impossible.

Complete figures for 91 nations show that the world's export trade for 1928 has continued to make substantial gains over preceding years. Roughly, the gains amounted to about \$300,000,000 each in North America and Western Europe, \$125,000,000 in South America and \$80,000,000 in Africa. These were offset by diminished exports during the year of about \$60,000,000 in Asia and \$50,000,000 in Central America. With a slight gain in Eastern Europe and Australasia the net gain for the year of a little less than \$700,000,000 at 1913 valuation is worth about \$1,000,000,000 at the 1928 value of the dollar.

Among the nations whose export trade diminished during the year the notable instances were France, whose exports are off \$110,000,000, British Ma-

laya, \$84,000,000, Roumania, \$43,000,000, Cuba, \$31,000,000, and Mexico, \$21,000,000. France's gain in export trade since 1913 was exactly cut in half last year. She still holds a balance of \$110,000,000 in excess of her 1913 export trade, however, which is a growth of her real exports by about 6 per cent. British Malaya also retains an aggregate gain of \$141,000,000, or 20 per cent, while Cuba and Mexico, in spite of recent adverse conditions are still 24 and 31 per cent better off, respectively, in real export trade than they were in 1913. Roumania's diminished trade in 1928 brings that country only 9 per cent below her 1913 exports. None of the larger 1928 shrinkages in exports, therefore, betokens any marked weakness in economic development.

Generally speaking, the gain recorded for 1928 has been accelerated during 1929 and it is likely that the rate of increase will be greater this year than last.

Proof of sound business conditions in the United States is given by the Council in the form of a record year for both American exports and imports up to October 1, surpassing any corresponding period since 1920. During the first nine months of the present year American exports have amounted to \$3,849,000,000 or \$292,000,000 greater than they were in 1927, the next highest total for this period. Imports for the same period at \$3,361,000,000 are likewise larger than for any year since 1920. The export gain of 9 per cent and the 10 per cent gain in imports indicate the largest growth of our foreign trade in any single year since the war.

## Kentucky Power Lines

E. W. Brown, chief engineer of the Kentucky Utilities Company, Louisville, advises that work has now begun on a transmission line from Lexington, Ky., to Maysville, a distance of 60 miles, and one from Shelbyville to Carrollton, a distance of 33 miles. Contract for the Lexington-Maysville line was awarded to the L. E. Myers Company, Chicago, Ill., while the Shelbyville-Carrollton line has not been awarded. The proposed 33 KV line from Mt. Sterling to Salt Lick, a distance of 22 miles, is being built by company forces. All material has been purchased except that for the Shelbyville-Carrollton line.

TOTAL EXPORT TRADE OF 91 NATIONS.  
(Adjusted to the value of the 1913 dollar.)

	1913	1925	1926	1927	1928
North America .....	\$3,009,000,000	\$4,051,000,000	\$4,189,000,000	\$4,485,000,000	\$4,776,000,000
Northern .....					
Latin .....					
America .....	382,000,000	531,000,000	619,000,000	557,000,000	520,000,000
Southern .....					
Latin .....					
America .....	1,211,000,000	1,238,000,000	1,435,000,000	1,497,000,000	1,625,000,000
Europe .....	2,251,000,000	1,366,000,000	1,581,000,000	1,740,000,000	1,744,000,000
Western .....					
Europe .....	9,802,000,000	8,294,000,000	8,212,000,000	9,378,000,000	9,670,000,000
Africa .....	733,000,000	745,000,000	780,000,000	853,000,000	935,000,000
Oceania .....	505,000,000	689,000,000	644,000,000	686,000,000	687,000,000
Asia .....	2,162,000,000	3,560,000,000	3,565,000,000	3,671,000,000	3,610,000,000
	\$20,055,000,000	\$20,454,000,000	\$21,025,000,000	\$22,867,000,000	\$23,567,000,000

## Growth of a Baltimore Electric Tool Manufacturer

By RICHARD WOODS EDMONDS.

**A** GROWTH from a volume of business of \$250,000 in 1918 to \$8,500,000 in 1929 is a 34-fold expansion. Based on estimates at this writing of this year's business, that is what the Black & Decker Manufacturing Company has accomplished in the past 12 years.

The founders of the business that bears their names—S. Duncan Black and Alonzo G. Decker—were machinery designers in a Baltimore establishment as youths and young men. In 1910, when both were at the age of 27, they embarked on a manufacturing venture of their own. With \$1200 between them and additional financial backing from several silent partners, they rented an old warehouse and went into the manufacture of fine machinery on order, contract work. While there was not much money in the business, the partners did make a living, and the manufacture of fine machinery gave them a training in precise work, and enabled them to develop the nucleus of a working force similarly trained.

Most of the electric tools manufactured by Black & Decker are driven by fractional horsepower universal electric mo-

tors that revolve at about 14,000 revolutions per minute. A train of gears reduces this speed to approximately 500 to 2500 R. P. M. at the spindle, depending upon the nature of the tool. In dealing with such high speeds in limited areas and in keeping lightness continually in mind, it is evident that every detail of bearings, gears, etc., must be held to the most precise limits to insure the quiet and efficient operation of the tool, together with the assurance of long life. A variation of a thousandth of an inch from manufacturing specifications in these parts would impair the successful operation of the tool.

But when the firm of Black & Decker was organized the partners had no thought of making drills. That came later. Making machinery on contract, they had a few large customers, and were constantly faced by the prospect of sudden idleness through business reverses to any of those customers. Accordingly, they determined to develop a product that could be sold to many customers; and the sale of which, as well as manufacture, they could control.

The electric drill was decided upon although at that time there were a considerable number of manufacturers in the field, some of whom had been manufacturing electric tools for a long time. Mr. Black and Mr. Decker, however, felt that certain improvements in design

would adapt this class of product to a broader and more general use and accordingly designed the Black & Decker electric drill with the pistol grip and trigger switch, hexagonal field case, and several other distinctive features which identify the tool today.

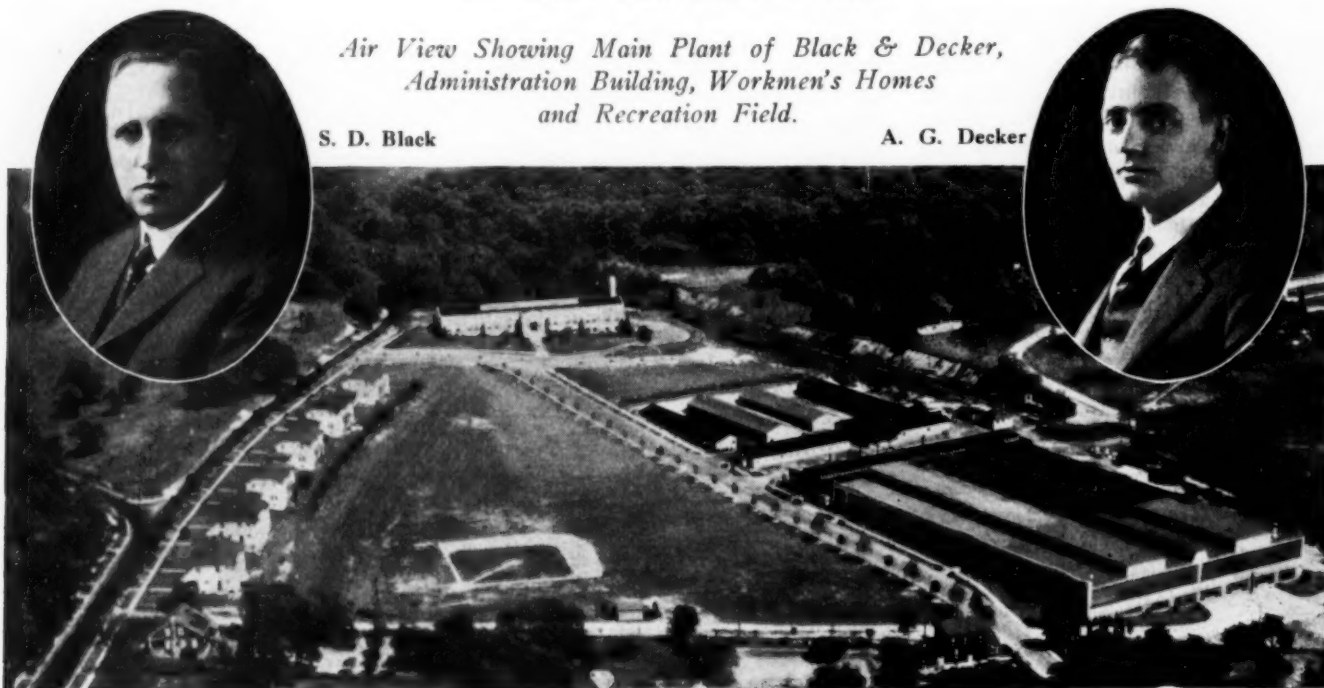
Electric tools prior to this time had been sold primarily by the manufacturer direct to the larger industrial plants, railways and shipyards. Necessarily, due to the restrictions imposed by this type of selling, the distribution and use of electric tools was confined more or less to the larger centers of population. The young partners recognized this marketing fact and believed that if electric tools were popularly priced and made available they would be accepted by the hundreds of thousands of small shops and garages in remote parts of the country as well as by the larger industrial plants. Accordingly they established a policy at the very beginning that Black & Decker electric tools would be merchandised through jobbers or distributors of mill supplies, automotive machinery, plumbing, sheet metal and hardware fields. This policy has been diligently pursued during the succeeding years, and its wisdom has been amply demonstrated.

The half-inch drill was the first to be put on the market. As it began to take

*Air View Showing Main Plant of Black & Decker, Administration Building, Workmen's Homes and Recreation Field.*

S. D. Black

A. G. Decker



Portraits by Bachrach





Reclaiming Oil From Chips From Automatic Screw Machines

hold, other sizes, up and down the scale, were added.

After drills came other tools, until the line today includes screw drivers, nut tighteners, valve lappers and refacers, tapping tools, grinders and saws.

The growth of the electric tool business was rapid from the start. The sales volume of \$1200 the first year was stepped up to \$15,000 the second year, \$60,000 the third, \$250,000 the fourth, and \$1,500,000 in the sixth year, which was 1920. As I have already stated, the estimate for this year's business, based on sales to date, is \$8,500,000.

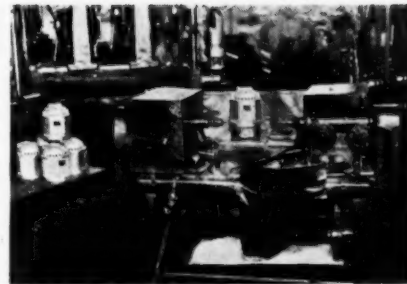
In 1917 the 7-year old partnership found that its 5-year old drill business demanded larger quarters with room for indefinite expansion. Accordingly a site of 137 acres was acquired just east of Towson, Md., a small town 10 miles north of the center of Baltimore. Transportation facilities were provided by a railway, and the neighboring town and surrounding countryside furnished the labor reserve needed for the growing business. Most of the 800 men and women employed in this Towson plant today live either in Towson or in the country to the north and east of the plant. The degree of skill required demands a high class of workers, and all working condi-

tions of the plant are designed to attract and hold the highest type.

In its expansion the company has acquired several subsidiary companies. First came the Marschke Manufacturing Co. of Indianapolis, manufacturers of heavy duty grinding and polishing machinery, it being felt that this line would very profitably supplement the already broad line of electric tools. The next was the Van Dorn Electric Tool Co. of Cleveland, manufacturers of a complete line of portable electric tools very nearly paralleling the Black & Decker line and selling through the same general trade channels. This company is operated as a separate organization with a distinct line of products sold by its own sales force.

Within the past year the Domestic Electric Company of Cleveland, Ohio,

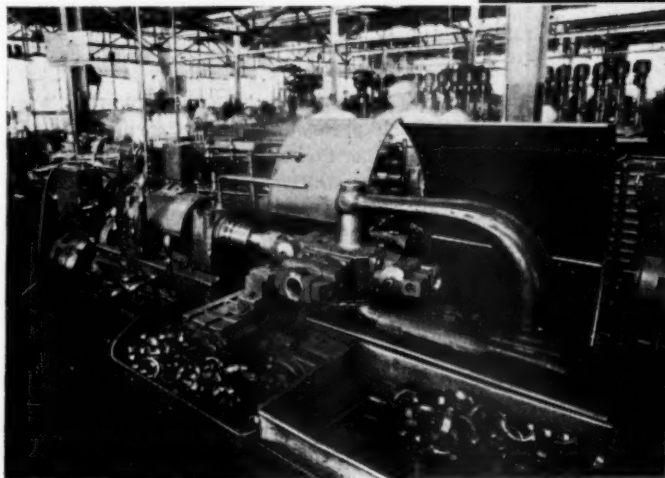
Girl Operating Grinding Wheel Driven by Air Turbine and Turning at Rate of 45,000 Revolutions Per Minute



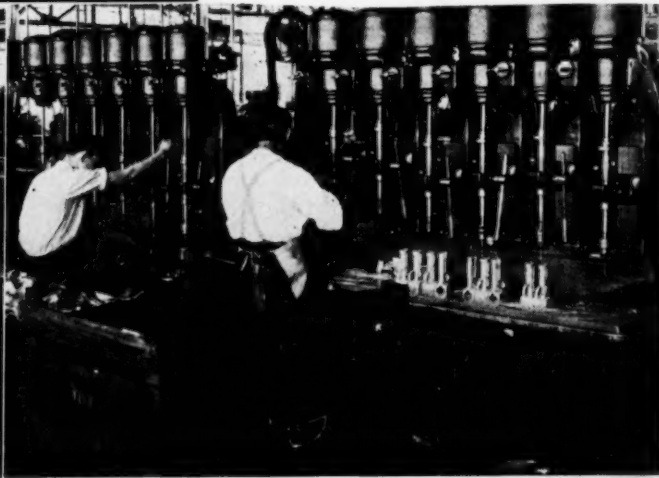
Special Automatic Indexing Jig Mounted in machine for drilling ventilation holes in field case of electric drill.

has also been acquired. This company designs universal electric motors which are embodied in the products of a great many of the leading manufacturers of household appliances, commercial appliances and motor driven tools. Only within the last few weeks the Fleming Machine Company of Worcester, Mass., manufacturers of a complete line of accessories and attachments for electric tools, has been acquired. For some years past Black & Decker have distributed the products of this company in connection with their tools. In addition to the above companies, Black & Decker also have subsidiary companies, the Black & Decker Mfg. Co., Ltd., Montreal, Canada; Black & Decker, Ltd., Slough, Bucks, England, and Black & Decker Australasia Ltd., Sydney, Australia. These plants are for manufacturing and assembling of Black & Decker and Van Dorn products in their respective parts of the world. All the above named companies are completely owned by Black & Decker.

The operation of this unit is similar to that of General Motors and many other large corporations, in this case the Black & Decker Mfg. Co., Towson, being both a manufacturing and selling and a holding company.



One of a Battery of Potter & Johnston Semi-Automatic Screw Machines



Multi-speed Drill Presses With Individual Motor Drive for Each Spindle

## \$2,500,000 Hydro Development in Florida

### Plant on Ocklocknee River Now Nearing Completion

The \$2,500,000 hydro-electric development now under construction by the West Florida Power Co. on the Ocklocknee river at Jackson Bluff, near Tallahassee, is to be completed and in full operation by January 1, 1930. The first unit was placed in operation September 23, and two additional units a short time later, but due to general weather conditions and the finishing up of details the entire plant is partially operating under reduced headwater.

For more than three years the company has been engaged in preliminary work and actual construction on this undertaking, which includes a concrete and brick power house, a concrete and steel spillway, 175 feet long and 39 feet high, a 3500-foot dyke, and 26 miles of transmission line extending from the generating plant to Tallahassee. The three turbo-generators—one of 3400 horsepower and two of 4800 horsepower capacity each—will annually produce 32,000,000 kilowatt-hours of electric power for distribution throughout western Florida in a territory hitherto without power at industrial rates.

The spillway, with its seven tainter gates of the type that may be raised to permit discharge of flood waters, and the earth embankment or dyke, which consists of approximately 350,000 cubic yards of earth and which has a Wakefield piling cutoff wall, together form a storage reservoir covering 20 square miles. The water thus impounded is to take care of the wide variation in runoff

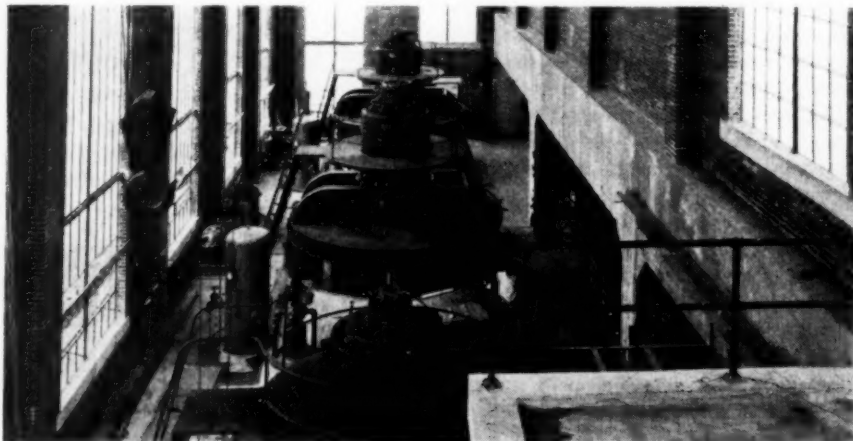
of the river, so there will be no interruption in continuity of operation of the plant, which will be tied in at Tallahassee with the Florida Power Corporation's system, feeding a transmission totaling 778 miles extending to Jasper at the Florida-Georgia border where a connection is made with the system of the Georgia Power & Light Co.

A problem encountered in construction was the underlying limestone foundation

cut and hauled to mills of the McRae Lumber Co., a short distance away, where it was manufactured into lumber.

Sand was removed from the river bed and banks for construction purposes. The gravel came from Alabama and the bricks from Georgia.

To Mees and Mees, Charlotte, N. C., the engineers who designed and supervised construction of the project, is attributed the credit for realizing the pos-



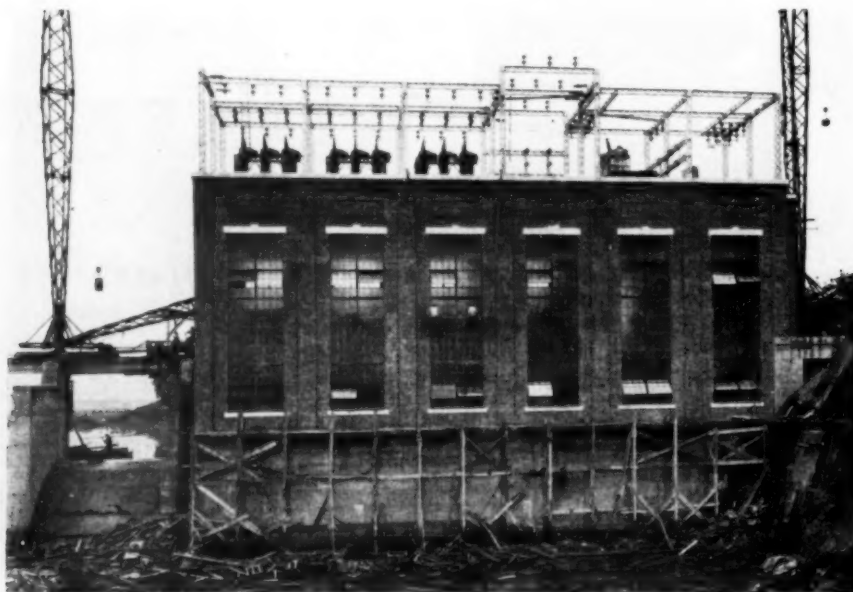
Interior of Power House of West Florida Power Co.

prevalent throughout western Florida. Because of the solubility of this stone it was necessary to drive piling to a depth sufficient to prevent seepage of water through underground channels. Another interesting feature was the large amount of timber removed from the reservoir area; of this timber 50,000,000 feet was

sibilities of the Jackson Bluff site and for carrying the undertaking through to the point of actual beginning of the work. The Hardaway Construction Co., Columbus, Ga., was general contractor. Electrical installation was made by the power company's forces. Among other contracts were:

**Water Turbines, Rack Rakes and Gate Hoists**—Newport News Shipbuilding & Dry Dock Co., Newport News, Va.  
**Generators, Switchboards and Interior Electrical Equipment**—Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa.  
**Transformers, Oil Circuit Breakers, Lightning Arrestors, etc.**—General Electric Co., Schenectady, N. Y.  
**Steel Work**—Virginia Bridge & Iron Co., Roanoke.

The constructing company, the West Florida Power Co., is owned by the Florida Power Corp., St. Petersburg, which operates as the southernmost unit of the Seaboard Public Service Co., New York, an Insull organization. Four steam and hydro-electric generating stations aggregating more than 75,000 horsepower comprise the Florida Power Corporation's generating facilities. These stations are the 24,850 horsepower steam plant at St. Petersburg, the 33,600 horsepower steam plant at Port Inglis, the 5476 horsepower hydro plant near Dunnellon on the Withlacoochee river, and the plant now being completed on the Ocklocknee river at Jackson Bluff.



Downstream Elevation of Hydro-Electric Plant at Jackson Bluff near Tallahassee



# Knight's "Education in the United States"

## A Historical Summary\*

By COURTENAY DE KALB.

[Mr. De Kalb is not only an engineer of international repute but is also a close student of educational problems, having been at different times in charge of a department in three universities, Missouri, Queens in Canada and, after an interval of some years, at Alabama, making a total of eight years engaged in such work.—Editor MANUFACTURERS RECORD.]

The book on Education by Dr. Edgar W. Knight is strictly what it professes to be. It is not a treatise nor a disquisition, but a history. It faithfully presents the story of the development of the school system in this country with scarcely the expression of an opinion. For that reason it is of great value.

The volume purports to be for the use of junior and senior students in our universities, and therefore is issued in the garb of a text-book. Its applicability, however, is far more extensive. It deserves to be read thoughtfully by a wide audience of men and women who are interested in providing the most wholesome type of training for American youth. Especially is it to be commended for the use of school boards and university regents throughout the country. It should be the aim of such persons, responsible for the conduct of our educational work, to eliminate whatever is objectionable and to create improved methods, which can only be intelligently done in a knowledge of the history of the things that have gone before. The author points out the peril of fads, and states that "Scheme after scheme has its day and then is heard of no more. School after school arises; movement after movement appears; experiments follow experiments; old methods, often in new and attractive styles, recommend themselves and become the fashion of the time." All this results in waste of effort, in detriment to the best interests of the students who become the victims of such fads, and, what will appeal most strongly to the American public, it spells economic waste.

On the economic side it is quite certain that it will come as a surprise to read that "More money is invested in the physical plants of education than in any other public undertaking. . . . More money is annually spent . . . for school support than for any other public cause. Approximately three billions were provided for this purpose in 1928. . . . There are nearly a million teachers, and nearly 29,000,000 pupils are enrolled in the various types of schools . . . Two persons out of every seven in the United States are giving practically all their

time to this large business." In spite of this vast national outlay it is the exception, due to faulty methods, for the product of any of these institutions to be able to write correctly the English language that they speak.

This elaborate system of public instruction "is established on the theory that a democratic form of government depends for its value and effectiveness upon a citizenship educated sufficiently to understand and to direct intelligently, efficiently, and with justice, all its affairs, private and personal, public and civil." Of course we are today a "democracy," and, within limits, the theory is correct, but it is interesting to observe that the United States was founded as a republic, which is an altogether different thing. Even the great founder of the so-called Democratic Party was anything but a democrat, and he advocated a system of advanced public education, faithfully recorded in Dr. Knight's volume, that had in it the elements of provision for true culture, depending, in the grades above what we now call the primary, upon competitive examination and official appointment based on scholarship. For reaching these higher grades the principle advocated by Jefferson was not unlike that prevailing today at West Point and Annapolis, where, in progression toward the diploma, the elimination of the less capable is severely rigid. Moreover, he proposed for such appointees the payment of all expenses and a modest salary the same as are paid to cadets at West Point and Annapolis.

Dr. Nicholas Murray Butler, President of Columbia University, in a recent widely heralded address, announced, "I am prepared to repeat the statement which I made in London in 1927 . . . that there is today in the world no great poet, no great philosopher, and no great religious leader." What then is the matter with the boasted system of education on which such incredible sums are being spent? Is the fault due to improper method or to decrease in intellectual ability? It was said of old by the Man of Nazareth, "Wherefore by their fruits shall ye know them." Again says Dr. Butler, in the same address, "The eclipse of liberalism is so plain that he who runs may read. . . . This eclipse is due to the shift in the center of gravity from

liberty to wealth." Wealth never has and never will inspire poetry, philosophy, or stimulate religious leadership, but liberty has been the song and the burden of the great thought of the ages. Wealth is fundamentally selfish, but liberty is the very quintessence of unselfishness because equally precious to all men, both rich and poor.

The high school may be assumed to represent the climax of the culture attempted to be given by our school system, as it is perhaps above the average, and is considerably higher than the training given the immediately preceding generations. In a number of the states the percentage of total enrollment attending high school exceeds twenty, and the highest percentage is that of California where it reaches twenty-five and three-tenths per cent. Virginia has only twelve and six-tenths per cent, and yet the famous Count Keyserling, rated as the keenest observer and most intelligent critic of the outstanding peculiarities of peoples and racial characteristics in the world today, in the September Atlantic Monthly, says, speaking of America, "The only really cultural atmosphere one finds today is that of Virginia," whereas, referring to California, he affirms, "What I could sense in this psychic atmosphere of California is the following: It is inhabited by a sort of primitive man. . . ." Therefore it appears that our intellectual salvation does not depend upon the high school. This, in fact, is a problem that is engaging the serious attention of many scholars.

The author of the volume before us says that there is a marked tendency to a shifting of the functions of our institutions, and that the state, through the public school, undertakes to teach manners and morals, once the peculiar obligation of the family and the Church. This inclines the child to defy parental teaching, and to elevate in place of such spiritual culture a purely secular training, administered by those who cannot possibly possess that regard for his future welfare that instinctively the parent experiences.

The Constitution did not recognize any religion, thereby ensuring religious freedom, but the Declaration of Independence proclaimed that "all men . . . are endowed by their Creator with certain

\*"Education in the United States," by Edgar W. Knight, of the University of North Carolina; Pp. 588, index; Ginn and Company, 1929.

inalienable rights," therefore, recognizing a Supreme God to whom we all are accountable, and when, after the Constitutional Convention had vainly endeavored to come to some sort of agreement, and was threatened with failure, which would have resulted in the creation of a multitude of separate states, Benjamin Franklin called attention to the fact that hitherto they had tried to omit that Creator of All Things from their deliberations, and he recommended prayer. From that moment they were able to progress toward that marvellous document which has been the defence of the liberties of millions of men. Today the existence of God is ignored by our schools. The training in morals is no better than that of the Greeks and Ro-

mans. Has no progress been made since those past ages? It has been well said, and it is refreshing to note that it is quoted by one of our great state universities, that "Educate a man's mind and not his heart and you have a devil."

### \$9,300,000 Levee Bonds

New Orleans, La.—The Orleans Levee Board has authorized the issuance of \$9,300,000 levee bonds, to include \$1,300,000 for reparations and \$8,000,000 for lake front improvements. The latter involves construction of a concrete seawall along Lake Ponchartrain between the new Basin canal and Bayou St. John, a distance of 5.5 miles.

### Florida Meeting A. S. M. E.

On November 18 the American Society of Mechanical Engineers, Florida Division, will hold a meeting at the University of Florida, Gainesville. Subjects include: Sugar, by N. C. Storey, Southern Sugar Co., Clewiston, Fla.; Cement, by C. E. Caron, general superintendent, Florida Portland Cement Co., Tampa; Electrical Transmission Systems, by G. C. Hyde, general manager of the Florida Public Service Co., and R. A. Jones, vice-president. There will be a storage batteries exhibit from the Cooper Corporation, Findlay, Ohio. Motion pictures entitled "Hydroelectric Power Production in the New South," by the du Pont Co., Wilmington, Del., will be shown.

## \$4,000,000 Expenditure on Municipal Buildings

### New Orleans Erecting Auditorium and Criminal Courts Structures, Each To Cost \$2,000,000

Construction of the new municipal auditorium at New Orleans, at a cost of approximately \$2,000,000, is expected to be completed by the first of January. The city is erecting also a \$2,000,000 criminal courts building, now about 50 per cent complete and expected to be ready for use by the first of May. With dimensions of 320 by 202 feet, together with a 2-story annex 316 by 88 feet, the auditorium will provide seating space for 11,000 people. Stage and orchestra pit are depressible, sinking to the floor level and providing a clear stretch of 202 feet from one balcony edge to the other, with an approximate width in the center of 100 feet. The stage will be 92 feet wide and 50 feet deep, centrally located on the floor and working on a 60-40 basis as relating to the main building and its annex.

Two projection rooms wired for talking pictures will be provided at each of the two upper ends of the balcony and through the use of a central soundproof curtain extending the width of the auditorium the stage may be used by two organizations at the same time. Of Indiana oolitic limestone construction, the

building will be equipped with stage fixtures, modern lighting and general paraphernalia. It is 5 stories high with 8-foot ramp entrances and exits on four sides. Even temperatures will be maintained by low-pressure steam ventilating

caps. Construction is of concrete and the structure will be 3 stories high, the equivalent of 5 ordinary floors. As a novel feature of the prison division, the bars of cells are heat proof, with flooring of composition cement designed to frustrate the sharpening of knives on its



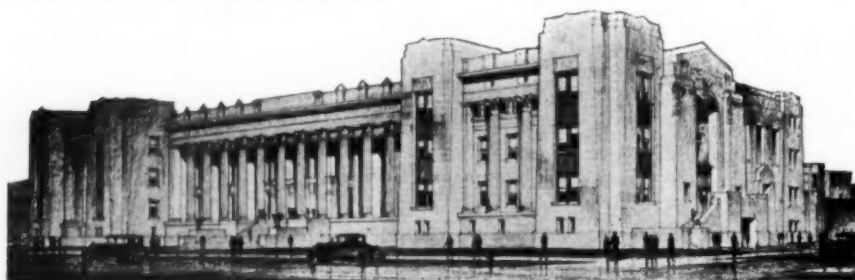
New Orleans Municipal Auditorium Under Construction

systems in winter and by six 12-foot pressure fans, operating in the basement, in summer. Acousti Celotex is used throughout the building.

The criminal courts building will cover an area approximately 450 by 320 feet, foundation being supported by 4000 pine piles each 35 feet long with concrete

surface. Ventilators will be installed to provide a change of air every five minutes. The first floor will be a half-basement, used as a garage for police and official cars and as a morgue. The parish prison and house of detention will be in two wings adjoining the courthouse at the rear. Offices of the court clerk and district attorney will be on the second floor with the record room and grand jury rooms on the mezzanine. There will be a death chamber, prison laundry, hospital and other facilities.

Favrot & Livaudais, Ltd., are architects for the auditorium and Caldwell Brothers and Bond Brothers, general contractors; plans and specifications for the criminal courts building were prepared by Diboll & Owen, Ltd., and general contract was awarded to R. P. Farnsworth & Co., all of New Orleans.



Criminal Courts and Jail Building, New Orleans



# Use of Structural Steel Increased in Face of Decline in General Building

American Institute of Steel Construction Holding Annual Meeting at Biloxi This Week

The Seventh Annual Convention of the American Institute of Steel Construction got under way at the Edgewater Gulf Hotel in Biloxi, Miss., on Wednesday of this week, with the report of the Institute's president, Charles N. Fitts. Mr. Fitts found much satisfaction in the fact that, while general building declined more than 10 per cent during 1928, the structural steel business showed "a notable increase over the record of last year." This, Mr. Fitts interpreted to indicate a growing tendency on the part of architects and engineers to use structural steel on building projects.

Referring to studies made by the Institute of economic heights of buildings, Mr. Fitts expressed doubt that skyscrapers are the cause of congestion and expressed the belief that, if the subject be carefully investigated, it will be found that they are the result of congestion.

Mr. Fitts recommended:

1. That preparations be made for a semi-centennial celebration in 1934 of the invention of the skyscraper.
2. That the Federal Government create in the Bureau of Standards a division to study the early steel-frame buildings that are now being demolished in some cities to make way for larger ones, in order to determine the wearing qualities of the various building materials used in them.
3. That an expert investigation be made of the effect of tall buildings on taxation, health and society.
4. That the U. S. Census of 1930 divide the figures on the structural steel industry to show various subdivisions thereof, such as bridge work and building construction; also, that it undertake a census of capacity for structural steel production and consumption in various trade areas, in order that overexpansion may be prevented.

Stabilization of the structural steel industry was discussed by Charles F. Abbott, executive director of the Institute.

Productive capacity unbalanced by consumption has "kept prices at a level that spelled losses for the less fortunate, small profits for many and satisfactory profits only for the fortunate few who were able to reduce their costs below the average," the speaker said. Mass production, he declared, is no antidote for this situation, for "the complete output must find an immediate profitable sale if the full benefits are to be realized."

The solution, the speaker said, is stabilization of production. This he explained, means a change from the com-

petitive idea in plant operation to the concept that when statistics indicate a market for 50 per cent of capacity, only 50 per cent of capacity be produced, price cutting avoided and prices based upon cost of operation plus a profit. Price-cutting to maintain full-time operation in slack time, the speaker denounced as selfish. He recommended that the industry "submerge individual selfishness for the good of the industry as a whole," but admitted the Institute's helplessness to enforce such a program.

Other recommendations by Mr. Abbott were:

Exert every effort to increase the use of structural steel.

Develop new uses and new markets.

Maintain present capacities until increased consumption can normally absorb additional output.

Structural steel for dams in place of concrete was discussed by Lee H. Miller, chief engineer of the Institute. The speaker stated that "for nearly 30 years structural steel dams have given satisfactory service without appreciable deterioration from corrosion." He added that efforts have been made to interest the United States Bureau of Reclamation in steel for the proposed dam at Black Canyon on the Colorado, but without success.

Steel floors, the speaker declared, offered another great field for development. Said he:

"It should be remembered that no building has ever been constructed except to provide a floor that can be protected from the weather, and with all our ages of experience, the floors have remained the most empirical, indeterminate and unsatisfactory part of our buildings. Steel floors offer an opportunity of answering every problem that floor construction can present and at a cost that promises its universal use when the public becomes aware of its possibilities. For the open hearth charging floor, it has met the severest service a floor can receive, and on the ocean liners it is combined with the most palatial environment we can devise. For residences, its economy and value should make possible the introduction of steel frames in this vast market. For multiple story structures, it will provide every function a floor is asked to do and add a torsional rigidity which no other type can develop. It will reduce the dead floor load by about one-half and make it possible to add from 25 per cent to 30 per cent more stories without increasing foundation loads."

A gigantic steel suspension bridge proposed to be built across the Narrows of

New York Harbor and to be known as Liberty Bridge, was described by D. B. Steinman, consulting engineer. Its towers, he said, are to be 800 feet high, its main span will be 4,500 feet or 1,000 feet longer than that of the Hudson River bridge, while its clear height, which must permit passage of the largest ocean liners, will be 235 feet above high water. Its main suspension cables will be 48 inches in diameter, will each contain 48,000 wires, and will have a tensile strength of 240,000 pounds per square inch. Its cost will be \$60,000,000 or more. The proposed structure is described as "the essential link in a highway system to connect Brooklyn with Staten Island, Long Island with New Jersey, New England with the West and South—all in the shortest, most direct line, without passing through Manhattan Island. Only in such manner can the present congestion of traffic in Manhattan be relieved."

Papers were presented in printed form by committees on the following subjects:

Code of Standard Practice, Fireproofing as Related to Structural Steel, Uniform Method of Cost Accounting, Publicity and Advertising, Standard Handbook, Artistic Bridge Design, and Wind Bracing and Technical Research.

## 234-Mile Rail Line Projected

San Antonio, Tex.—The State Railroad Commission, Austin, has approved plans of the Gulf & West Texas Railroad, R. W. Morrison, president, of this city, for the construction of a 234-mile railroad between San Antonio and San Angelo. Application for a permit is now pending with the Interstate Commerce Commission and it is understood that the Board of City Development of San Angelo will file a brief in support of the project with that body.

## Storage Plant for Power Company

Richmond, Va.—The Virginia Electric and Power Company has purchased property on Canal street, between Adams and Jefferson streets, for constructing a storage and distribution plant to cost around \$200,000. Carneal, Johnston & Wright, of this city, are preparing plans for the building, which will be 2 stories, of reinforced concrete. The site is 300 by 125 feet.

## Senator Ransdell's Masterly Effort for Protection of Southern Industries and Agriculture

SENATOR COLE BLEASE of South Carolina read into the Congressional Record recently a letter from a South Carolina lumberman stating that Russian lumber is being laid down in New York for \$20.20, as compared with an average cost of \$25 for manufacturing lumber in South Carolina, to which freight rates must be added. Thereupon Senator Ransdell of Louisiana obtained the floor and spoke vigorously in favor of a protective tariff policy for the Democratic party. Senator Ransdell traced the history of the Democratic party from its inception in its attitude towards a protective tariff, saying in part:

"It is not hard in the light of recorded history to recognize the fact that the doctrine of protection for American farm and factory products is not a new one to the Democratic party. Its great founder, Thomas Jefferson, his illustrious contemporaries and followers, Madison, Monroe, Jackson, and a host of others, emphatically and unequivocally indorsed that doctrine and believed in its ultimate workability and good for the American people. Jefferson's remedy, in its simplest terms, for agriculture and industry alike, was adequate protection. His handiwork is seen in the first revenue act, passed by the First Congress, and placed upon our statute books on July 4, 1789. That measure came from the inspired pen of James Madison, who, in its preparation, counseled with his closest friend and political mentor, the Sage of Monticello."

And "James Madison, close student of Thomas Jefferson's school of political thought, \* \* \* had witnessed the decline of our commercial star." \* \* \* That "he believed in protection of our products as the quickest and surest way to restore prosperity" following the depression, Senator Ransdell showed by quoting his special message to Congress in 1815, in which Madison said:

"There can be no subject that can enter with greater force and merit into the deliberations than the consideration of the means to preserve and promote the manufactures which have sprung into existence, and attained an unparalleled maturity throughout the United States during the period of the European Wars. This source of national independence and wealth I anxiously commend to the prompt and constant guardianship of Congress."

Madison, the Senator showed, fought for protection throughout his life, and his successor in the White House, James Monroe, another Democrat, he quoted as having said in his inaugural address in 1817, "Our manufactures will require the systematic and fostering aid of the government."

Following Monroe came Andrew Jack-

son; and in fact, in the campaign of 1824 all of the candidates for the office—Adams, Jackson, Clay and Crawford—"based their candidacies in part on their support of Mr. Monroe's advocacy of additional protection." "Old Hickory" he quoted as having said, in 1824, "It is time we should become a little more Americanized, and instead of feeding paupers and laborers of England, feed our own; or else, in a short time, by continuing our present policy, we shall all be rendered paupers ourselves."

This is the first of those early utterances quoted by Senator Ransdell that shows unmistakably a clear grasp of the fact that our labor depends for employment upon the activity of our industries, and that unless industries are sufficiently protected to be dominant in the domestic market, labor will not be prosperous and the whole population will suffer from the consequent lack of purchasing power. Senator Ransdell comments that "This is convincing testimony of the adherence of one of our greatest Democratic statesmen to a policy which we are told today is a Republican device."

Why did the Democratic party depart for a while from this, its traditional policy? The Senator explains why in his account of the conversion of Calhoun from the protection to the free trade policy. Calhoun was influenced by the fact that, following the invention of the cotton gin, the interests of the South changed from those of a manufacturing to those of a purely agricultural section, and it was the cotton planters' desire to sell their staple in England and to buy there, duty free, the manufactured articles they needed and did not make.

Following Senator Ransdell's review of the early stand of his party on the tariff as a means of protection for American standards of living, the Senator made a powerful plea for a return to that policy by the party of today. Said he:

"As applicable today as they were when penned by Thomas Jefferson are these words:

"If in the course of your observations or inquiries, agriculture, manufactures, commerce and navigation should appear to need any aid within the limits of our constitutional powers, your sense of their importance is a sufficient assurance they will occupy your attention."

The speaker then reminded his Democratic colleagues of the pledge of their party, as expressed in its platform of 1928, and he quoted the Democratic candidate for the presidency as saying that

the party is committed "to a definite stand in favor of such tariff schedules as will to the very limit protect legitimate business enterprise, as well as American labor, from ruinous competition of foreign-made goods. \* \* \* I say to the American working-man that the Democratic party will not do a single thing that will take from his weekly pay envelope a 5-cent piece. To the American farmer, I say that the Democratic party will do everything in its power to put back into his pocket all that belongs there."

And finally Senator Ransdell clinched his demand upon his party for support of the pending tariff bill by reading the telegram sent by John J. Raskob and Senator Millard E. Tydings, chairman of the Democratic Senatorial Committee, during the presidential campaign, to the Democratic Senators and Representatives and the Democratic candidates for office. In that telegram it was stated, "We are asking every Democratic candidate for Senate and House to permit us to sign his name to the following declaration: 'We the undersigned Democratic candidates for the House and the Senate reaffirm the allegiance of our party to a non-partisan tariff commission as enunciated in the Democratic platform adopted at Houston and declare our approval of the constructive interpretation placed on the tariff plank by our standard bearer, Governor Smith' \* \* \*" when he pledged himself as quoted above. The speaker added that:

"To this telegram 24 Democratic Senators and 115 Representatives now holding office in the upper and lower halls of Congress replied favorably, granting the permission requested. The Senators sitting on this side of the chamber who wired unqualified approval of the principles outlined in that message are:

"Henry F. Ashurst, Arizona; Alben W. Barkley, Kentucky; Edwin S. Broussard, Louisiana; T. H. Caraway, Arkansas; Royal S. Copeland, New York; C. C. Dill, Washington; Duncan U. Fletcher, Florida; Walter F. George, Georgia; Carl Hayden, Arizona; Pat Harrison, Mississippi; Harry B. Hawes, Missouri; William J. Harris, Georgia; William H. King, Utah; Lee S. Overman, North Carolina; Key Pittman, Nevada; Joseph E. Ransdell, Louisiana; Joseph T. Robinson, Arkansas; H. D. Stephens, Mississippi; Morris Sheppard, Texas; Millard E. Tydings, Maryland; T. J. Walsh, Montana; Burton K. Wheeler, Montana; David I. Walsh, Massachusetts; Robert F. Wagner, New York.

"I would ask my Democratic colleagues to remember the contents of that telegram and their approbation thereof



when the time comes to vote upon many of the schedules of this bill."

Following his splendid review of the Democratic party's early stand and recent pledges for adequate protection to American industry, Senator Ransdell began his own powerful argument for protection, opening it with the statement, "The experience of recent years has taught the South that its industries cannot prosper—if, indeed, they can survive—without a reasonable measure of protection." And coming to agriculture, he said "It is generally recognized that all branches of agriculture have at last reached a point where a protective policy is becoming more definitely and directly effective than was thought possible 10 or 20 years ago. \* \* \* In fine, this is a tariff accruing to the industries that are suffering. It seems to me that instead of the opposition which is being exhibited by some of the Southern Senators, they should be bending every effort toward securing the early passage of a bill which carries so many benefits to the nation and to every state in the South."

### Florida Unifying Its Citrus Fruit Marketing Program

The Federal Farm Board announces that Chase & Company, one of the large and responsible shippers of Florida, has joined the Florida Citrus Exchange; also that contracts have been closed with the International Fruit Company, the Lucerne Park Fruit Association and the Carpenters Union. Two new associations have been established, bringing in a considerable volume of new fruit to

the exchange. This indicates, states the Board, that substantial progress is being made toward a unified program for marketing the citrus fruit of Florida.

### \$400,000 Pulp and Paper Mill Improvements

The West Virginia Pulp & Paper Company, New York, has under construction at its mill at Piedmont, W. Va., a new water purification plant for a capacity of 10,000,000 to 12,000,000 gallons daily, to insure clean, sterilized water to the pulp and paper mill. The purification plant consists of an arrangement for chemical treating, aeration, settling and filtration, construction being handled by the Morton C. Tuttle Co., Boston, Mass., after designs by Malcolm Pirnie, consulting engineer of New York City. Pumping equipment for the most part is being supplied by the De Laval Steam Turbine Co., Trenton, N. J., the pumps to be driven by Westinghouse motors.

The company is also enlarging and reconstructing its plant for the reduction of mill wastes now going to the river, consisting of evaporators, burners, rotaries and filters. Construction is being handled by mill forces after designs by the company's engineers. Equipment is being furnished by the Zarembo Evaporator Co., Buffalo, N. Y.; Manitowoc Engineering Works, Manitowoc, Wis.; Erie City Iron Works, Erie, Pa.; the Chicago Pneumatic Tool Co. and the Oliver United Filters, Inc., both of New York. The construction of the purification plant and the enlargement of the reduction plant will each cost about \$200,000.

### \$6,000,000 IRRIGATION AND POWER PROJECT

Canal and Ditch System to Serve 60,000 Acres

Eagle Pass, Tex.—Pending formal approval by the State Board of Water Engineers, the Maverick County Water Improvement District No. 1, Eagle Pass, is working on plans for a \$6,000,000 irrigation and hydro-electric power project on the Rio Grande River. The proposed power plant would cost about \$1,000,000, it is estimated, while a canal and ditch system to convey water over an area of 60,000 acres of land would cost about \$5,000,000. The company has a permit authorizing the use of 1500 second-feet of water, of which 900 or more second-feet are for power purposes, as the limit for irrigation is 600 second-feet under any circumstances. Plans provide that all water used for power purposes shall be returned to the river, so that water users below the canal intake may not be deprived of the use of it. Tentative plans call for taking the water from the river some distance above Eagle Pass, sufficiently high to develop power as it flows down the canal. Electric power would be sold and proceeds used to pay security obligations of the district.

### \$500,000 Sewer Bonds Sold

Louisville, Ky.—Sewer bonds in the amount of \$500,000 have been sold by the city to the American National Company and Kean, Taylor & Company, both of New York, \$445,095 being paid for 445 4¼ per cent bonds of \$1000 denomination, and par for \$55,000 4½ per cent bonds.



On the Way to the Mill

Moving Big Loads of Logs on the Job of the Weston-Oram Lumber Company, Rhine, Ga.—Caterpillar Tractors Follow the Woodman's Axe in This Heavily Timbered, Swampy Forest Tract in Georgia.

## LETTERS FROM OUR READERS

### Responsibility Rests Upon Chain Stores for Greater Community Upbuilding.

The Farmers National Bank  
Chickasha, Okla.

*Editor Manufacturers Record:*

I read with a great deal of interest your article concerning chain stores and the various replies thereto. It appears to me that due consideration to the fundamentals involved has not been given in the replies. Many of the basic principles affecting a community, the building and maintaining of a community, and the contribution thereto by the various industries and lines of business therein have been overlooked.

Most of the chain store operators recognize that in their present method of operation there is something lacking, but just what it is and how to remedy the situation they do not know.

In my opinion, there should be a greater contribution by the chain stores to the community in which they operate, other than by making contribution to the local chamber of commerce or community chest, or the joining of civic clubs by its managers.

Things to be considered are: What is the necessary contribution by a business of a community to that community, and what is necessary to be put into a community to build, maintain and continue its prosperity? What has been done by the present citizenship of any community in which a large number of chain stores are located that made that community, or city, an attractive location for the chain stores? Whatever was done by the then citizenship, business and other enterprises, must be continued by the business now in power, in order to maintain the same prosperity. We find that stable communities are only built through the efforts, time and money of a citizenship which has its life and fortune, so as to speak, invested in it.

A prosperous community or city must be owned by a people who are willing to take the fruits of their fortune and labor and put back into it that part representing profit. Good homes, schools, churches, roads, streets and civic improvements of every kind and character must be built, and that can only be accomplished by those who have their own interests at stake, their lives and their money, and an absolute love for their community.

In all thriving communities, from time to time, there are various expansion programs being fostered; in some localities a county wide dairy program, a program for the building of schools, churches, hospitals, court houses, roads, factories, railroad extensions and many other new and permanent enterprises too numerous to mention, and these are usually thought out and put over by that group of local citizens who have their money invested in a business, and have taken a profit therefrom in years gone by and made other investments in the com-

munity, thereby becoming a great part of the community and having something more to prompt the creation of greater activities than reaping a profit, which might be sent out of the community, or the drawing of a salary to manage a foreign business located in the community.

Managers of local chain stores are not retained in a locality very long, usually not long enough to become a part of the community. They are usually not home owners, nor have they other investments in the community, and their time is so occupied that they do not, or cannot, participate in local activities or the furtherance of local enterprises to the same extent, with the same zeal, or with the same object in view as the man who owns a part of the community and has been a part of its building.

It is emphatically a fact that prosperous communities can only continue to be prosperous in keeping with the amount of effort, or the continued effort, of their people in the furtherance of expansion programs of many kinds. The chain store, in order to do its part and have a part in the economic life of a community, must become a constructive force and a creative body, instead of only a contributing force with its money.

In Chickasha, there are 21 chain stores, most of which have been established here within the past two or three years. The full effect of these stores on the economic or civic life of the community has, as yet, not been fully determined. Of the total number, I believe there are 15 which make total annual contributions to the Chamber of Commerce amounting to \$660, which is not one-third the amount contributed by the five local banks and their members. I am of the opinion that the permanent investments of the managers of these stores would not exceed \$15,000.

Until a community becomes prosperous and inviting, a chain store does not locate there; that prosperity has been brought about by and through the efforts of a stabilized community the people of which have a greater interest than taking a profit out of it and putting back nothing more than the original investment. A community is not different from a prosperous business, in that it cannot grow and prosper unless the profit from the various lines of business and individuals be put back into expansion and development.

I understand that another large store representing one of the national chains in our community has a system of employment whereby it carries what is known as a waiting list. It will invite a certain number of clerks to report in the morning and if it does not appear to the manager that business is likely to be good, he tells them to come back at noon. At noon, if he again does not think business will be good he tells them to come back the following morning. Through this method of employment a number of clerks are able to work only two or three days a week. Such a method is not usually employed by local stores, but on the contrary their employees are frequently retained when there is no business and when business is dull, through the respect the management has for the

rights of the employee, realizing that the employer has the same duty to the employee that the employee has to him.

The chain store, through scientific methods of equipping its place of business, has added a great deal to the general touch of the cities in which it operates. It has in most instances compelled the local merchant to remodel and re-equip his own business. This, in itself, has been an assistance, but I believe that until the chain store realizes it must become a part of the community and take on its full share of taxation, of creative and development work, it will not be a satisfactory unit in the economic welfare of the community.

I intend what I have said to be constructive rather than destructive and with the hope that, with the continued effort of those interested, a plan of co-operation and upbuilding may be worked out to the interest of the community served.

L. C. WRIGHT, Cashier.

### Believes in National Preparedness

Mobile Basin and Tennessee River  
Improvement Association.  
Montgomery, Ala.

*Editor Manufacturers Record:*

I heartily agree with the ideas expressed in your article on national preparedness. I have never had any patience with the disarmament gatherings. If any man thinks the millenium is close at hand he is very much mistaken. The only solution for human woe is education.

The owner of one of the great steamship terminals at Mobile has called my attention to an article in your issue of October 3 bearing on the survey of the Mississippi basin by the Research Service, Inc. I would like for you to send me two copies of that issue for my personal use.

E. L. MAY, Secretary.

### Iodine in Florida Products

Bradenton, Florida.

*Editor Manufacturers Record:*

Permit me to thank you in behalf of all the people of Florida for the fine advertising you have done for the state in helping to put across the movement in regard to iodine and other advantages which Florida offers as its gift to the nation.

I was told by a local physician that Dr. Kellogg of Battle Creek and Dr. Chase, his associate, have been coming to Bradenton for years incognito, and while fishing and playing around had spent their real energy and effort on the ultra violet rays in connection with the unpublished facts in regard to iodine, the vitamins, etc.

JOSIAH VARN.



# IRON, STEEL AND METAL MARKET

## Steel Production Declines— Further Seasonal Decreases Expected—Prices Hold Fairly Well

Pittsburgh, November 11—[Special.]—The rate of steel production has decreased somewhat further and is now a trifle above 75 per cent of capacity. There is quite a range in rates between districts and even between mills in the same district. The Chicago and Birmingham districts appear to be doing the best, with the Pittsburgh district next. Rail production, which has been increasing, is a factor in each case. The Youngstown district is doing rather poorly, at perhaps under 60 per cent. Some of the smaller mills in various districts, making specialties largely for the automobile trade are at particularly low rates.

Some further and seasonal decrease in steel production is certainly to be expected to the end of the year, probably to a rate under 70 per cent. Whether, or to what extent, production will conform to precedent by increasing after January 1 is not even conjectured. Steel producers cannot get any light from customers who are unable to appraise their future when all trade is doubtful on account of the collapse in the stock market.

Steel prices are holding quite well so far as ordinary market quotations are concerned, but there are suspicions as to shading on special lots. Bars, shapes and plates are quotable at 1.90c on large tonnages and down to single carloads if the specifications are not objectionable. For months when the market was strong bars were at 1.95c and shapes and plates at 1.90c to 1.95c depending on tonnage. Galvanized sheets are easier at 3.40c to 3.50c against a flat 3.50c recently quoted. For several months they had been 3.60c to 3.70c. Nails are steady at recently announced prices of \$2.40 to \$2.50, according to size of buyer.

The September report of the car service division of the American Railway Association shows that the freight car shops are somewhat better booked than was supposed. Class 1 roads installed 9219 cars during September and had 29,317 cars on order at the end of the month. Trade reports indicated 19,850 cars ordered by Class 1 roads during October and estimating installations at 9000 cars would leave 40,000 cars on books of the shops November 1, only a few per cent under the maximum reported for several years. There is talk

of railroads buying 20,000 to 30,000 cars in the next couple of months.

Fabricated structural steel lettings reported last week were light, only 24,000 tons, but the average in the last five weeks is somewhat above the general average since January 1, which is record high. The shops are well booked ahead.

The full report of the Missouri Pacific's rail buying shows 61,000 tons against the preliminary report of 40,000 tons mentioned a week ago, the 61,000 tons being somewhat above the tonnage taken by that road last year or year before. The total to date in the season's rail buying movement is now a full million tons, 3 to 5 per cent more than the same roads bought last year or year before. It is estimated that the movement is now 55 to 60 per cent completed, the remaining buying to be spread over the next three or four months.

The preliminary report on automobile production in October shows 400,000 cars and trucks produced in the month in the United States and Canada. This represents simply reversion to normal or average production for an October, after a bulge which ran production fully one-third above the expectancy based on previous rates. This month there is a reaction to below normal or average.

Bessemer and open-hearth steel ingot production in October is reported at 4,511,650 tons, making October the first month this year to run below the same month of last year. In ten months, this year has a 15 per cent lead over last year and the calendar year will probably show a trifle over 10 per cent gain over 1928, thus far the record year by 7 per cent.

## The Metals Are Very Weak

New York, November 11—[Special.]—The metal markets as a class are the weakest so far this year, the reflection of the shaking down on the New York Stock Exchange. Some of the declines here were attributed to drops on the London Metal Exchange, but these in turn are believed to have been due to the American situation.

The price of electrolytic copper has so far not yielded to the general trend among the metals though pressure against the present quotation is increasing. In view of the reduction of prices of leading makes of radios, of declines in certain makes of automobiles and in other finished commodities involving the use of copper, it would seem that copper prices could not hold indefinitely at present levels.

Wednesday was a day of some drastic

declines. Tin sank to 39½c per pound, or to the lowest since August, 1923, when 38½c per pound was reached. On that day lead was reduced by \$3 per ton, making total declines of \$11 per ton during the present movement. The price of zinc ore was reduced \$2 per ton to \$42, after having been unchanged for many months.

The steel trade journals were fairly optimistic in their mid-week reports though admitted that the behavior of the stock market would sober steel consumers and possibly cause a postponement of buying in several lines. In the case of the automobile industry, the expected revival in November has been postponed and in some instances orders for raw materials have either been canceled outright or postponed. In some respects the consumption of copper may be helped by the stock market breaks as money may be diverted to other channels such as building, manufacturing and the like. Yet in the final analysis the purchasing power of the public must be considered and if the public cannot purchase new homes, manufactured products, etc., the diversion of money will come to naught.

One especially bright feature is the unusual demand for locomotives, 400 being either in state of inquiry or proposed inquiry, the largest number pending at one time in history. Much copper goes into locomotive boiler tubes and various bits of equipment.

The minor metals are virtually unchanged in price and also very quiet. Silver has been steady for many weeks now, selling between 49½c and 50c per ounce. Quicksilver is also steady, though what little price tendency exists is downward. Antimony is still selling at around 8½c to 8¾c per pound, duty paid. Aluminum is in a class with copper as regards steadiness of price.

More substitutes for tin are being announced for use in the canning industry. It is reported that a leading can company believes celluloid to be a commercial substitute for tin plate in the making of cans. It can be used for either glass or tin plate, it is stated. It is said to have nearly the tensile strength of metal, the transparency of glass and the resistance to corrosion. A prominent Norwegian company is making cans of aluminum instead of tin plate for the canning of fish. Though aluminum is more expensive, some saving is effected through embossing labels on the metal rather than using printed labels.

Before copper producers cut prices they will probably first curtail production. In fact, one producer has already

announced a curtailment by 25 per cent. It will be recalled that in the spring a cut of 10 per cent in operations was made. Yet there are many who believe that despite a cut in production a reduction in price must follow before the end of the year. Some believe the cut in price will be 3c per pound, which would bring the domestic price down to 15c, at which substantial profits could still be made, as the average cost of production in this country is about 9c per pound. It is believed, too, that any mark-down would be made in one lump, rather than through a series of declines. A sharp reduction all at once would instill more confidence into the buyers.

Late in the week the zinc price was cut \$5 per ton to 6.25c per pound, East St. Louis, making a total decline in this movement of \$11 per ton, the same as in lead. Zinc statistics are very unfavorable, there having been a gain of 3754 tons in surplus stocks during October, following a sharp gain the preceding month. Stocks are now the largest in several months.

Lead now sells at 6.25c per pound, New York, and 6.10c per pound, East St. Louis, the lowest since last July. Business has been light, the price unsettled having disturbed purchasing. Consumption of lead is still satisfactory, though the slump in the automobile industry means less lead used in battery form.

The tin market has been lifeless. Despite the apparently bargain quotations consumers have not bought freely, feeling that prices may still go lower. During October the world's visible supplies increased over 1000 tons and American tin deliveries were the lowest in several months, implying lessened consumption.

### Spot Orders for Pig Iron the Chief Activity in Birmingham District

Birmingham, Ala., November 11—[Special.]—Southern furnace interests are hopeful that the first quarter of the coming year will be as fruitful as the last three months of this year, though very few orders have been heard of as yet for the new period. Spot orders have been fairly active recently and shipments on old orders continue briskly. A few sales have been made since the middle of October for use in the middle West, the St. Louis territory having placed a little business. The movement to the Atlantic coast port territory will also continue for a while yet; much Alabama iron will have found its way into the competitive sections when the movement ceases, if it does cease. Spot business carries the base price that has obtained for some time, \$14.50 in the home

territory and \$14 in competitive sections. A 50-cent advance has been sounded out on first quarter business with probabilities of a greater advance.

Production is being maintained in this district, 15 blast furnaces making pig iron, the greater portion of it basic. Cast iron pressure pipe shops are feeling the effects of a sluggish demand so far as new business is concerned but production is kept up. Other iron-using shops are doing fairly well, the radiator plant, for instance, operating about 80 per cent capacity. Stove makers are still producing. One or two of the larger machine shops and foundries are keeping busy through solicitation the country over.

Steel mills operations are around 70 to 75 per cent capacity. Bars are in good demand. The rail mill of the Ensley Works of the Tennessee Coal, Iron & Railroad Company has a small accumulation of orders and is producing steadily. Some of the Western and Southwestern railroads are placing a portion of their business in this district.

Gulf States Steel Company has intimated to contractors that completion of its blooming, galvanizing and plate mills at Gadsden is desired on schedule time, early in the coming year. This company has been showing steadily improving earnings and anticipates activity in 1930. Contract is to be given out in the near future for a sheet mill also at Gadsden, continuous rolling methods of the American Rolling Mill Company having been leased.

The coal mining industry shows a

slight improvement again, output of mines in Alabama increasing slowly. Probabilities of early development of by-products of coal are to be seen in consideration given to engineers in research departments of big coal concerns of the country who have been visiting this district and investigating the coals here. Coke is holding its own, price base on foundry being the same as for several months, \$5. Production is near full capacity of by-product works of the district.

Scrap iron and steel is also holding its own, demand for iron products being rather slow and only two or three items on the steel side showing any life. Heavy melting steel is quoted at \$13.50 for the best quality and \$10.50 for the general run of the product. A large amount of heavy melting steel, everything considered, is in demand right now.

Pig iron and iron and steel scrap quotations are as follows:

#### PIG IRON

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$14.00 to \$14.50; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$14.50 to \$15.00; iron of 2.75 to 3.25 per cent silicon, \$15.00 to \$15.50; iron of 3.25 to 3.75 per cent silicon, \$15.50 to \$16.00.

#### OLD MATERIAL

Old steel axes .....	\$17.00 to \$18.00
Old iron axes .....	17.00 to 18.00
Old steel rails .....	13.00 to 14.00
Heavy melting steel .....	10.50 to 13.50
No. 1 cast .....	13.00 to 14.00
Stove plate .....	12.50 to 13.00
No. 1 R. R. wrought .....	10.00 to 11.00
Old car wheels .....	11.00 to 12.00
Old tram-car wheels .....	12.00 to 12.50
Machine shop turnings .....	7.00 to 8.00
Cast iron borings .....	7.00 to 8.00
Cast-iron borings, (Chem) ...	13.00 to 13.50

### \$1,250,000 Rural Electric Line Construction

Birmingham, Ala. — The Alabama Power Company has authorized 69 additional rural electric lines in 40 counties in Alabama, to cost approximately \$1,250,000 and serve more than 1900 customers. This extension program is expected to be carried out in 1930 and the new lines, with those authorized for the remaining months of this year, will cover a distance of 649 miles. With extensions to be completed this year and in 1930, the company expects to have a total of 442 strictly rural lines by the end of 1930, extending for a distance of 1446 miles and serving nearly 10,000 customers in all but 9 of the 67 counties of the state.

### Public-Utility Earnings Increase

Gross earnings of public-utility enterprises in September, exclusive of telephone and telegraph companies, as reported to the Department of Commerce by 95 companies or systems operating

gas, electric light, heat, power, traction and water services and comprising practically all of the important organizations in the United States, were \$185,000,000, as compared with \$179,500,000 in August, and \$179,346,145 in September, 1928.

### PENNRoad CORPORATION ACQUIRES RAILROAD

Secures Control of Pittsburgh & West Virginia line.

New York press reports announce the purchase of the Pittsburgh & West Virginia Railway by the Pennroad Corporation, recently organized by Pennsylvania Railroad interests. The deal was financed, it is said, by a recent offering of nearly \$50,000,000 of stock by the Pennroad Corporation, which was underwritten by Kuhn, Loeb & Co., New York. Control of the P. & W. Va. road was effected by the purchase of the holdings of Frank E. Taplin and Charles F. Taplin, chairman and general counsel, respectively, of the railroad, who will retain their positions in the road's directorate, it is announced.



# HIGHWAYS AND MOTOR TRANSPORT

## \$6,500,000 BRIDGE AND TUNNEL PROJECT

### 7-Mile Structure Would Cross Tampa Bay

St. Petersburg, Fla.—Details are being arranged by the West Coast Bridge & Tunnel Company, with offices in this city, for a vehicular tunnel of 4155 feet under the main ship channel of Tampa Bay, with causeways and concrete trestles as approaches, the structure to be approximately 7 miles in length from shore to shore, between the lower tip of Pinellas County, in St. Petersburg, and the northern edge of Manatee County. Plans call for a reinforced concrete tube similar in design to a tunnel in operation between Oakland and Alameda, Cal. The project is estimated to cost \$6,500,000 and when completed would be a connecting link through St. Petersburg between the Gulf Coast Highway and the Tamiami Trail, saving about 40 minutes between St. Petersburg and Southern Florida. A traffic survey indicates the potential traffic over the bridge and through the tunnel at more than 550,000 vehicles annually, it is said.

## \$3,000,000 for Texas County Roads

Brownwood, Tex.—With a bond issue of \$1,650,000 recently voted, to be supplemented by an approximately similar amount of state and Federal funds, Brown County will expend more than \$3,000,000 on a road construction program, which will cover concrete and macadam highways radiating in five directions from Brownwood. The county is improving more than 200 miles of lateral roads under the program.

## \$2,340,000 Texas Road Contracts

Austin, Tex.—In a two-day session here the State Highway Commission awarded contracts for a total of 166 miles of road construction to involve an expenditure of approximately \$2,340,000, the biggest project being a reinforced concrete, steel and treated timber bridge across the Colorado River in Matagorda County, for which the L. H. Lacy Company, Dallas, was awarded contract at \$244,334.

## \$1,000,000 Road Construction

Chattanooga, Tenn.—The State Highway Commission will probably cooperate with Hamilton County in the construction of eight projects next year, according to T. C. McEwen, chief engineer of the Commission. The work will call for a total expenditure of approximate-

ly \$1,000,000, while one of the most important projects will be a new concrete highway up Lookout Mountain along the old Johnson Pike right-of-way. The state will not be asked to participate in building the highway up the mountain, it is said, but will be requested to take over the extension to the New York monument and along the west brow of the mountain. In addition to this project, other work contemplated includes the widening of the Dayton pike, paving a portion of it in the north end of the county, grading and draining Ringgold highway from east end of Bachman tunnel to Georgia state line, grading and draining Chattanooga-Georgetown highway, paving East Chattanooga-Silverdale highway, placing heavy surface on link of Signal Mountain highway and grading and draining portion of Birmingham highway.

The State Highway Commission, Jefferson City, Mo., opens bids November 15 for two road projects, including 4.2 miles and 5.5 miles of grade and drainage construction, respectively, both in Carter County.

## \$600,000 County Road Bonds

Marfa, Tex.—An election has been called for November 30 by the Presidio County Commissioners' Court on a bond issue of \$600,000 for building new roads. Of the total issue, \$500,000 would be used to pave a road east and west through the county from the Brewster County line to the Jeff Davis County line, and from the Rio Grande River on the south to Jeff Davis County on the north. About \$100,000 of the bonds would be used to construct and maintain laterals.

## Valuable Information

W. H. Tarvin, president, Kentucky Rock Asphalt Company, Louisville, in referring to an article "Seek Improvement of Back Country Roads" which appeared recently, writes:

"We look forward with interest to each issue of the MANUFACTURERS RECORD for information contained under the heading 'Road Construction Items,' and find it quite valuable to us. We are also interested in a great number of the articles contained in your publication, which is read regularly by the officials of this company."

## Motor Transportation Costs High on Low-Type Highways

Motorists Pay One-Third More for "Privilege" of Driving Over Bad Roads

By E. E. DUFFY.

The motorist who pays out a dollar in car operating expenses in traveling over high type roads, must pay \$1.18 in traveling the same distance on intermediate type roads. The travel cost over the same distance on low type roads is \$1.38.

These costs, determined by Prof. T. R. Agg and H. S. Carter of Iowa State College for the "imaginary" average car, clearly indicate the high cost of traveling over so-called low type roads. According to their calculations the cost of driving over gravel and so on is one-third greater than driving over smooth concrete.

For the sake of convenience, let it be conservatively considered that the cost of driving a car over concrete is five cents a mile. A dollar will then buy 20 miles of travel on hard pavement. The average motorist now travels some 6000 miles yearly at, therefore, an estimated cost of \$300. If the motorist's traveling

were all to be done over intermediate type roads rather than concrete, the additional cost for this "privilege" would be \$54. But if the motorist were compelled to bump over low type roads the extra travel cost would be \$114—which is \$114 that could be better spent.

A motorists' association has just pointed out that sixteen states this year spent less money on highway improvement than they did last year, even in the face of mounting car registrations. Obviously, this cannot be called economy, for every mile of unimproved road a community tolerates costs the taxpayer hard cash through extra car expenses which have to do with fuel and oil, car depreciation, tire wear and allied items. Cheaper motoring can only come through more extensive highway improvements and these must come through the expedient of making more money available for highway construction.

# AVIATION, AIRPORTS AND AIRWAYS

## Aerial Survey of 4670 Square Miles

Vicksburg, Miss.—Bids have been received by the Vicksburg District U. S. Engineer office for aerial photographic and survey work on 4670 square miles of land in the Red River territory, the following firms submitting estimates: Air Map Corporation of America, Brooklyn, N. Y.; Aerial Survey Co., Inc., Cleveland, Ohio; Holenberg Air Mapping Company, Inc., Chicago; Hamilton-Maxwell, Inc., Stamford, Conn.; Curtiss Flying Service, Inc., New York; Southwestern Aerial Surveys Company, Inc., Austin, Tex.; Aero Service Corporation, Philadelphia; Fairchild Aerial Surveys, Inc., New York. The bids are now being tabulated and will be sent to the War Department for approval.

## New Diesel Engine for Airplanes

Los Angeles, Cal.—Following a report by Charles F. Willard, its chief engineer, upon a new Diesel engine recently developed in Southern California for airplanes, the Aircraft Finance Corporation of America, of this city, has obtained an option on the new motor looking toward ultimate control of its manufacture. The new engine, it is said, weighs no more per horsepower than gasoline engines now used in airplanes and is built to operate at a fuel cost less than that of automobiles. Plans are being worked out for a plant either here or in Kansas City or St. Louis, although it is understood that an announcement will not be made for 90 days.

## \$300,000 to Improve Aviation in Mexico

Torreón, Mexico.—Approximately \$300,000 will be expended by the Corporation Aeronautics de Transportes, S. A., Theodore H. Hull, president, to improve its aviation facilities in Northern Mexico during the next few months, according to a statement by Mr. Hull. The company has under construction airports at Parral, Aguas Calientes, Queretaro, Saltillo and Torreón and has adopted plans for an airport at Nacozari and for the immediate construction of hangars and other facilities at Mazatlan, Nogales, Leon, Chihuahua and Mexico City. It operates two major lines which cover Northern Mexico, one extending from El Paso, Tex., to Mexico City, and the inter-ocean route from Brownsville, Tex., near the Gulf of Mexico, to Mazatlan, Sinaloa, on the Pacific coast. The company also

operates a line between Nogales and Chihuahua and plans soon to inaugurate a Los Angeles-Mexico City line by way of the two former cities. At present the company's planes are flying on an average of more than 3000 miles daily, but when all lines are in operation this mileage is expected to be increased to 6000 miles.

## Aerial Ambulance Service

New York press dispatches announce that the Colonial Flying Service and the Scully-Walton Ambulance Company, both of that city, have organized a commercial ambulance service, said to be the first of its kind ever inaugurated. Planes to be used, it is said, will vary according to the nature of the case, from single-motored Fairchild cabin monoplanes to multi-engined Sikorsky amphibians and Ford transports. Day and night service will be offered between New York and any point having an adequate landing field.

## Automatic Air Mail Postage Vender

Washington, D. C.—Recently incorporated with a capital stock of \$1,000,000 by F. C. Roberts of this city, and associates, the Air Mail Apparatus Corporation of America, plans to assemble or cause to be assembled an automatic device to vend an envelope, sheet of writing paper and stamp. It is understood that approximately 35 per cent of the parts of the machine will be specially manufactured and the remaining parts made from stock materials. Harlan Wood, Washington attorney, is general counsel of the corporation.

## Air-Rail Route Chicago-New Orleans

New Orleans, La.—A new air-rail route from Chicago to New Orleans, recently announced by J. V. Lanigan, general passenger agent of the Illinois Central System, Chicago, following an arrangement between the Illinois Central and Continental Air Services, Inc., is expected to cut approximately 6 hours off the time between Chicago and New Orleans. Under the terms of the agreement, schedules of Continental Air Service planes will be coordinated with existing Illinois Central schedules, so that an overnight train trip and a short plane journey will put a traveler in Chicago or New Orleans by mid-afternoon.

## Southern Air Transport Schedules

Fort Worth, Tex.—Schedules of northbound airplanes operated by the Southern Air Transport, Inc., of this city, a subsidiary of the Aviation Corporation, New York, on the passenger line from Houston to Dallas and Fort Worth have been advanced thirty minutes to insure connection with important train schedules at Dallas. Northbound planes will leave Houston at 2.30 o'clock instead of 3.00 o'clock as formerly, in order to connect with the Missouri-Kansas-Texas train to Tulsa, St. Louis and Kansas City.

## Baltimore Aircraft Show

The Baltimore Aircraft Show, sponsored by the Flying Club of Baltimore and endorsed by the Baltimore Association of Commerce, will be held at the Fifth Regiment Armory, Baltimore, from December 9 to December 14, inclusive. With an expected attendance of from 70,000 to 80,000, this show will doubtless place Baltimore in the first rank of air-minded cities in this country. It is estimated that the development and expansion program of the aviation industry now under way in the city will involve an expenditure of \$26,000,000, including the construction of 5 airports already under construction, while new companies are entering the field. The industry will soon represent millions of invested capital and other millions in salaries and wages paid to Baltimore workers.

## Airplane Hangar Fire Tests

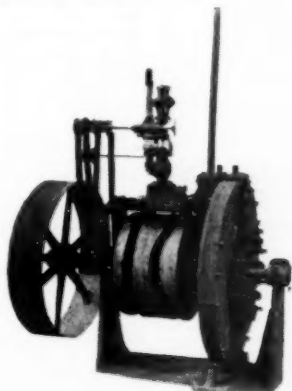
Washington, D. C.—The National Committee on Wood Utilization of the Department of Commerce, now making a study of airport structures, is co-operating in the work of the Fact-Finding Committee on Automatic Sprinkler Protection for Airplane Hangars, and will build an airplane hangar at the Bureau of Standards, in which to conduct tests to determine the effectiveness of automatic sprinkler systems. This hangar will be of wood with a concrete foundation and floor, having inside dimensions of 65 by 80 feet, and 18-foot clearance between the floor and lower chord of roof trusses. Construction will be started at once and the hangar made ready for tests within six weeks. Colonel Harry H. Blee, chief of the Airports Division of the Aeronautics Branch of the Department of Commerce, is chairman of a committee named by the Department to conduct the tests.



## NEW AND IMPROVED EQUIPMENT

### Rotary Air Compressor Engine

A recent invention of C. R. Reid, Heidelberg, Miss., for which patent is pending, is designed as an improvement on the combustion rotary pump air compressor engine he patented in 1913. This



This Engine Has Capacity of 300 Gallons per Minute

new engine is described as particularly adapted to pumping fluids, such as oil and gasoline, as well as water, and is capable of handling 300 gallons per minute. The cylinder is 36 inches in diameter and 2 inches deep, while the rotor is 3 inches thick and 2 inches wide, with 16 square inches of pushing or pulling surface, the pumps handling 6 gallons of water at each revolution. The two valves are handled with a cam and the cylinder is packed with metal rings, making it steam-, water- and air-tight. Everything in the pump is made in sections of two parts and finished with perfect joints, it is said, and the pump itself may be made from one to ten or twelve feet in diameter.

### Changing Tunnel to Open Cut

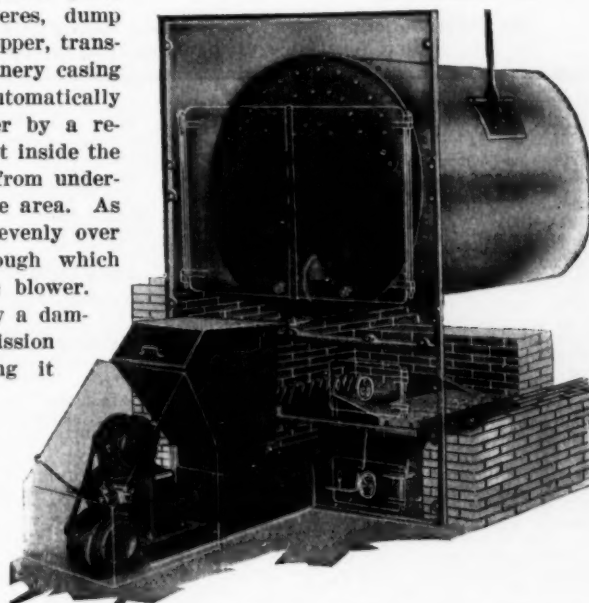
Among the major construction projects undertaken by the Chesapeake & Ohio Railway Co. this year, is the changing of the Ona tunnel on the Huntington division, to an open cut. The work in progress will involve the removal of 684,000 cubic yards of earth and rock and will cost more than \$700,000. This is the first tunnel east of Huntington, W. Va., and is 1306 feet long. It was bored in 1906 and 1907, when the line was changed between St. Albans and Barboursville, W. Va., a distance of 26 miles, the change being made to eliminate steep grades and stiff curves. Removal of the tunnel is expected to effect an economy in operation and maintenance, while disposing of all question of clearance. Contract for the work was awarded to Langhorne & Langhorne, of Huntington,

whose forces began work in October, 1928. The project is expected to be completed by December 15 next.

### Marion Underfeed Stoker

Intended for use in steam power plants with boiler ratings up to 200 horsepower, the Marion Machine, Foundry & Supply Co., Marion, Ind., has developed and placed on the market a new underfeed stoker, Type U. Component parts consist of a retort, tuyeres, dump grates, conveyor screw, hopper, transmission, fan motor, machinery casing and control. Coal is automatically conveyed from the hopper by a revolving spiral to the retort inside the furnace, where it is fed from underneath upward into the fire area. As the fuel rises it spreads evenly over the tuyere openings through which air is supplied from the blower. Air supply is regulated by a damper and the fuel transmission has three speeds, making it easy to regulate the fire to load requirements. As fuel is fed upward and burned, it spreads outward and deposits ash and clinkers on side grate bars where they are periodically dumped into the ash pit. The

bars have a cutting action that crushes the clinkers into small pieces. Transmission and fan are electrically driven, the motor being placed directly above the transmission gears. Motor, transmission and fan are equipped with roller and ball bearings and all gears are cut, hardened and heat treated, while the spiral is made of steel. Machinery is covered with a steel case and an automatic regulator and switch are furnished with each stoker.



Stoker for use in Smaller Steam Power Plants

### Electrical Equipment for Arlington Bridge

Washington, D. C.—Electrical equipment for the lift span of the new \$14,000,000 Arlington Memorial Bridge under construction here will be furnished by the Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa. Two bascule spans will be driven by variable voltage equipment and controlled by a single operator in the pier. In the same pier there will be a motor generator set consisting of one a.-c. induction motor driving two differential compound wound d.-c. generators and an exciter that furnishes excitation as well as power for the control circuit, breaks and auxiliaries. There will be one d.-c. generator for each leaf furnishing power for two shunt wound d.-c. motors that drive each. The entire control will be interlocked so that only the proper sequence of operation may be obtained.

Mecklenburg County, F. M. Gresham, auditor, Charlotte, N. C., sold \$1,200,000 6 per cent courthouse and jail bond an-

ticipation notes to the American Trust Company, Charlotte, at par and premium of \$300.

### \$500,000 Power Unit Completed

Natchez, Miss.—A new \$500,000 power unit was recently completed here by the Southwestern Gas & Electric Company and formally opened with a public reception. Its construction marks the completion of a 5-year program, during which the horsepower capacity of the plant has been increased from 575 to 3700 and the plant building enlarged correspondingly. The new unit was erected by the L. E. Myers Construction Co., Dallas, Tex., of brick and steel, 105 by 70 feet, 52 feet high, with steel truss roof. The engines have been designed to burn fuel oils of a wide range of gravities, the fuel being automatically injected into a fuel valve atomizer. The total weight of the larger engine is 225 tons, of which approximately 110 tons of the mass is constantly in motion.

# CONSTRUCTION DEPARTMENT

## and

# NEW ENTERPRISES

Covering the initial announcements of new undertakings with additional information about enterprises previously mentioned. The date at the end of an item indicates preliminary facts were given in a previous issue.

When writing to a new firm or corporation the name of at least one of the incorporators should be placed on the envelope to expedite its handling by the local postoffice. Mail may be delayed unless complete address is given.

Building and Construction Proposed and Contracts Awarded; Manufacturing, Mining, Power, and Land Developments; Public Works; Transportation; Communication; Financial Enterprises; New Business Opportunities Reported in the Sixteen Southern States.

The Daily Bulletin of the Manufacturers Record gives each business day advance news published in this weekly review. It is invaluable to those requiring prompt information. Subscription price \$40.00 a year.

### Airports, Airplane Plants, Etc.

Alabama—Cities of Sheffield and Monrovia plan establishing airports.

Ala., Birmingham—City, J. M. Jones, Jr., Pres., City Comm. votes within 60 to 90 days on bond issue for municipal airport. 10-17

Fla., Lake Placid—City plans airport; erect hangar, 1 story, steel, brick.

Fla., Miami—Curtiss Flying Service, Inc., 27-29 W. 57th St., New York, let contract to Sandquist & Snow, 2602 S. W. 28 Lane, for \$70,000 hangar and \$10,000 passenger terminal at seaplane base; Ebsury Foundation Co. has contract for \$11,500 seaplane ramp; 150x150 ft.; terminal designed by D. H. Nellenborg, Archt., Miami Beach; hangar, 43 x 147 ft. over all, with plane storage space, 100x120 ft., accommodating 20 planes, Pueblo style, including ticket office, telegraph offices, etc., with classrooms, locker rooms, etc., on second floor, designed by Geo. M. Bartlett, 103 Park Ave., New York; C. C. Conklin, Resident Engr., in charge of all construction operations; Stone & Webster Engineering Corp., Engr., 120 Broadway, New York. 10-24

Fla., St. Petersburg—Luthy Aircraft Corp., Jackson, Mich., reported, move plant here within 40 days.

Md., Baltimore—Bd of Awards, City Hall, opens bids Nov. 20 for \$24,000 retaining wall, municipal airport; approx. 1000 ft. long, 9 ft. high; Elmer E. Hammond, Harbor, Engr. 10-24

Md., Baltimore—Baltimore Airways, Inc., offering 50,000 shares class A common stock through Calvert Securities Corp., 32 S. Calvert St., company formed in Maryland to engage in aircraft industry; established scheduled Travel-Air Service between Baltimore and New York; operates training school; plans to soon establish package-carrying service between Baltimore and New York and inaugurating regular schedule to and from Miami, Fla., via Jacksonville, Fla., 3 trips weekly; has 105-acre airport, Park Heights Blvd., have 2 steel hangars, accommodating 15 planes; erect during winter 4 additional hangars, 50x100 ft.; officers include Edward Handler, Pres., Pres. Calvert Securities Corp.; Fred Clement Weber, V. Pres., Pres. F. C. Weber & Co., Stanley Theater Bldg.; Theodore E. McKeldin, Sec., Calvert Bldg.

Mo., Kansas City—Aircraft Finance Corp. of America, Charles F. Willard, Ch. Engr., Western Pacific Bldg., Los Angeles, Calif., may establish plant here or St. Louis, to manufacture new Diesel engines for airplanes.

Mo., St. Louis—See Mo., Kansas City.

Oklahoma—Cities of Bozeman and Livingston plan airports.

Okla., Asher—City, R. Cook, Clerk, has preliminary plans for airport.

Okla., Wewoka—C. M. McCall, Airport Mgr., receiving bids for steel structure. 7-25

Tenn., Knoxville—City, W. W. Mynatt, Director of Public Service, receives bids in few days for grading and laying out runways, Bearden Field; involves excavation of 30,000 cu. yd. earth; \$12,000. 11-7

Tenn., Murfreesboro—Interstate Airlines, Inc., Evansville, Ind., let contract to Graybar Electric Co., for lighting equipment for "Sky Harbor" airport.

Tex., Belton—U. S. Dept. of Commerce, Washington, D. C., establish emergency landing field, to cost \$10,000; level and illuminate.

Tex., Catarina—City plans airport.

Va., South Hill—City plans airport.

### Bridges, Culverts and Viaducts

#### Proposed Construction

Ala., Birmingham—City, A. J. Hawkins, Engr., probably let contract within 60 days for Fourteenth St. underpass; depress Fourteenth St. 5½ ft. through underpass.

Ala., Mobile—See Roads, Streets, Paving.

Arkansas—State Highway Dept., Little Rock, receives bids Nov. 20 for 13 rein. conc. deck girder bridges, 103 to 579 ft. in length, on conc. pile bents, over White River bottoms, State Highway No. 16, between Bald Knob, White County, and Augusta, Woodruff County.

Fla., Apalachicola—Franklin County plans bridge across bay to East Point, connecting Gulf Coast Scenic Highway, cost \$300,000; Standish Engineering Corp., 400 North Michigan Ave., Chicago, Ill.

Ga., Athens—Clarke and Oconee Counties Commrs. plan bridge over creek, near Cord Mill on Athens-Watkinsville Highway, to eliminate curve on Oconee County side, and straighten and improve road; Homer Nicholson, Engr., making survey.

Ga., Atlanta—City Council, I. N. Ragsdale, Mayor, considering expending \$70,000 to widen underpass at South Blvd.; tentative plans provide for widening Boulevard for at least additional 5-ft. widening of underpass; C. E. Kauffman, City Bridge Engr., completed drawings; Clark Donaldson, Ch. of Construction.

Ky., Carrollton—War Dept., Washington, D. C., approved plans State Highway Comm., Frankfort, for bridge across Ohio River at Carrollton. 10-31

Kentucky—State Highway Comm., Frankfort, plans receiving bids to build 12 bridges and acquire 4 bridges: Cumberland River Bridge, Burnside; Ohio River Bridge, Maysville; Kentucky River at Clay's Ferry; Kentucky River at Rio and Munfordville; Kentucky River at Boonsboro and at Tyrone; Green River at Spottsville; Tennessee River, Egner's Ferry and at Paducah; Ohio River, Henderson and Carrollton, Cumberland River, Smithland; Green River, Calhoun; will sell bonds. 5-16

Louisiana—Louisiana Highway Comm., received low bids for 3 bridges. See Roads, Streets, Paving.

La., New Orleans—War Dept., Washington, D. C., approved application of George A. Hero and Allen S. Hackett, Const. Engr., 505 Whitney-Central Bldg., for permission to submit additional data in reconsideration of plans for Hero-Hackett Bridge across Mississippi River between New Orleans and Gretna; previously noted, Engaged Waddell & Hardesty, 150 Church St., New York City, as Designing Engrs. for project. 1-31

Md., Baltimore—City, Wm. F. Broening, Mayor, approved recommendation of Chas. F. Goob, Ch. Engr., for West Baltimore viaduct over Pennsylvania R. R. tracks at Lafayette Ave.; eliminate grade crossing; to be built in connection with \$22,500,000 improvement program of Pennsylvania Railroad.

Md., Baltimore—City, Charles F. Goob, Ch. Engr., completed plans for Broening Highway underpass, under Cornwall St. to Western Electric Co. plant at Point Breeze; eliminate grade crossing on Pennsylvania R. R.; Henry G. Perring, Const. Engr., Court Square Bldg. 8-15

North Carolina—See Roads, Streets, Paving.

N. C., Charlotte—City Council, Edgar Reed, City Clk., considering straightening underpass of Southern Ry. on North Tryon St. See Financial News Columns.

N. C., Beaufort—U. S. Engineer Office, W. A. Snow, Maj. Corps of Engrs., Dist. Engr., Wilmington, receives bids Dec. 14 for highway bridge across Intercoastal Waterways, Beaufort to Cape Fear.

Okla., Tulsa—City, Dan W. Patton, Mayor, receives bids Nov. 22 for Boulder Ave. elevation over Frisco right of way; considering Cincinnati Ave., elevation; K. R. Tels, City Engr.

Tex., Hondo—State Highway Comm., Austin, receives bids Nov. 25 and 26 for conc. bridge over Seco River, Medina County, Highway No. 3, between D'Hanis and Uvalde; G. G. Wickline, State Highway Bridge Engr.

Tex., Fort Worth—City, O. E. Carr, Mgr., and Texas Pacific Ry. Co., E. F. Mitchell, Ch. Engr., Dallas, plan 6 grade crossings: Henderson St.; Jennings Ave.; South Main St. underpass; Jennings, Ballinger and Summit St. viaducts; D. L. Lewis, City Engr.

Tex., Llano—State Highway Comm., Austin, receives bids soon for 900-ft. steel and conc. bridge across Llano River, Highway No. 9, Llano County; Two 180-ft. steel truss, two 50-ft. steel I-beam, and 440-ft. rein. conc. girder approach spans; S. S. Posey, Res. Engr., Fredericksburg.

Texas-Oklahoma—State Highway Comm. of Texas, Austin, and State Highway Comm. of Oklahoma, Oklahoma City, receive bids Nov. 25 for 3 bridges over Red River: Bryan County, Oklahoma—Grayson County, Texas—four 450-ft., one 80-ft. trusses and three 50-ft. I-beam spans, U. S. No. 75; Love County, Okla.—Cook County, Tex.—five 210-ft., one 120-ft. and one 80-ft. trusses, U. S. No. 77; Jefferson County, Okla.—Montague County, Tex.—thirteen 144-ft. trusses, one 40-ft. I-beam span at each end of bridge, U. S. No. 81; Gibb Gilchrist, Texas State Highway Engr.; A. R. Losh, Oklahoma State Highway Engr. 10-10, under Oklahoma.

Tex., Port Arthur—City, J. W. O'Neal, Mayor, plans double leaf bascule bridge with 200 ft. clearance between fender pilings, over Sabine-Neches ship channel, connecting Port Arthur and Pleasure Pier; 20-ft. roadway; walkways; all contingent on bond election Nov. 26; government will soon widen channel, 125 to 150 ft.

Tex., San Angelo—Tom Green County Commrs. Court, J. T. Mathison, County



Judge, receives bids Nov. 16 for 1,200-ft. struct. steel and rein. conc. bridge across Middle Concho River; grade and small drainage structures. 10-3

Virginia—State Highway Comm., Richmond, received low bids for 6 bridges: Scott County—4 bridges over Cove Creek, Route 10, west of Bristol, Alley Construction Co., Bristol, \$22,251; Cumberland County—bridge over Willis River, Route 13, Roanoke Iron & Bridge Works, Inc., Roanoke, \$6,308; Wise County—bridge over Powell River, Route 11, near Blackwood, Alley Construction Co., \$10,802; C. S. Mullen, Ch. Engr. 10-31

#### Contracts Awarded

Alabama—State Highway Comm. let contracts for 11 bridges. See Roads, Streets, Paving.

Fla., Pensacola—Carnegie Steel Co., Pittsburgh, Pa., has contract for struct. steel for Pensacola Bay Bridge; Northwest Florida Corp. has contract for construction. 10-24

Ga., Atlanta—Nashville, Chattanooga & St. Louis Ry., R. H. McDonald, Ch. Engr., Nashville, Tenn., let contract to Virginia Bridge & Iron Co., Roanoke, Va., for 875 tons steel structures for Forsyth St. Viaduct. 7-11

Louisiana—Louisiana Highway Comm., let contract for 8 bridges. See Roads, Streets, Paving.

Miss., Magnolia—Pike County Bd. of Supvrs., Charles E. Brunfield, Clk., let contract to L. S. Felder for 2 bridges in Fourth Dist.; to D. M. Simmons, for bridge in Second Dist.

Oklahoma—State Highway Comm., Oklahoma City, let contracts for 2 bridges: Tulsa County—Sand Springs Bridge across Arkansas River; grading to Southwest L. E. Myers Company, American Exchange Bk. Bldg., Dallas, Tex., \$49,103; steel design, Green-Boots Construction Co., 519½ West Main St., Oklahoma City, at \$233,578, and at \$24,806 for overhead structure; Ellis-Rogers Mills Counties—Pack Saddle Crossing over South Canadian River, Highway No. 24; North Approach, Ellis County, Southwest L. E. Myers Co., \$7,413; south approach, Roger Mills County, at \$7,885; main bridge, laminated wood floor, Lakeside Bridge & Steel Co., Little Rock, Ark., \$305,830; A. R. Losh, State Highway Engr. 10-17

Tex., Fort Worth—City, O. E. Carr, Mgr., and Texas Pacific Ry. Co., E. F. Mitchell, Ch. Engr., Dallas, let contract to T. H. Johnson, Dallas, \$35,382, for Tennessee Ave. underpass; D. L. Lewis, City Engr. 11-7

#### Canning and Packing Plants

Fla., West Palm Beach—Jupiter Packers, Inc., chartered; H. A. Lage, J. L. Gleason.

Tex., Harlingen—John Morris, reported, interested in canning plant on Commerce St.; corrugated iron; 40x100 ft.; cost \$20,000.

Fla., Lakeland—Southland Citrus Fruit Co., Geo. R. McKay, Pres., Guard Bldg., Cleveland, O., reported, remodel and erect addition to present plant; brick and hollow tile; steel frame; 3 story and basement; 160x60 ft.; built-up roof; metal windows.

Miss., Meridian—Chamber of Commerce, H. S. Howard, Sec.-Mgr., Miazza-Woods Bldg., interested in establishment of vegetable canning plant.

#### Clayworking Plants

N. C., Smithfield—Old Mill Pottery, Inc., capital \$20,000, chartered; W. N. Holt, G. A. Martin.

#### Coal Mines and Coke Ovens

Ky., Evarts—Fairview Coal Co., incorporated; Henry Turner, James Middleton.

Ky., Mayking—Cameo Coal Corp., incorporated; A. B. Ewen.

W. Va., Charleston—Leevale Collieries, Inc., chartered; John J. D. Preston, Kanawha Bank & Trust Bldg., operate coal mines in Clear Fork Dist., Raleigh County.

#### Concrete and Cement Plants

Miss., Vicksburg—National Portland Cement Co., A. J. Kutner, Asst. Gen. Mgr., Santa Fe Bldg., Dallas, Tex., advises, acquired quarries fronting 1750 ft. on riverfront here, suitable for manufacture cement and propose to erect 3500 bbl. capacity mill using most modern machinery available; will be in market for all material and machinery for construction, but do not plan purchasing before Jan. 1; all purchases to be made under supervision of company's office. 10-10

#### Drainage, Dredging and Irrigation

Ala., Kennedy—Beaver & Bogue Creek Drainage Dist. plans beginning drainage system within 4 months; surveys complete; hold hearing Dec. 3.

Ala., Mobile—Mississippi Valley Association retained Theodore Brent, Inc., New Orleans, La., to make survey of proposed Coosa-Alabama water route, Rome, Ga., to Mobile.

Arkansas—Morgan Engineering Co., Goodwyn Inst. Bldg., Memphis, Tenn., engaged by 3 districts in Craighead County, 2 in Mississippi County and 1 in Poinsett County to improve drainage systems; construct new canal; plans call for about 20 mi. of high levees along St. Francis River and through lakes; work on new plans to start about Jan. 1.

Florida—U. S. Attorney General approved title to Florida East Coast Canal, Jacksonville to Miami, 75 ft. wide, 8 ft. deep; Congress recently appropriated \$4,221,000 for improvement and set aside annual maintenance of \$125,000. 5-23

Ga., Savannah—War Dept. approved recommendations for modification of existing harbor project to provide for channel 26 ft. deep, 100 ft. wide from Seaboard Air Line Ry. bridge to foot Kings Island, cost \$157,000. 7-11

La., Kahns—Bd. of Commrs. of Gravity Drainage Dist. No. 2 of Parish of West Baton Rouge, let contract to Swinney & Coleman, Napaflax, Ala., for drainage canals, constituting approx. 250,000 cu. yd., at 9.82 cents per cu. yd.; Thos. H. Hewes, Engr., Oscar. 10-24

Texas—Earl B. Samms, New York City, applied to Bd. of Water Engrs. for permission to divert water from Rio Grande, in Cameron County, for irrigating 1805.9 acres; water to be impounded in 2 reservoirs, created by 2 dams across Rancho Viejo Resaca, and levee around low land in south part of Clark-Hatton subdivision; to be considered Nov. 25; V. L. Conrad, Engr., Brownsville.

Tex., Donna—Hidalgo County Water Control & Improvement Dist. No. 1, generally known as Donna Dist., construct irrigation system, including 6,666,000 sq. ft. conc. lining, 1,237.98 cu. yd. conc., 132,556 lb. steel, 18 conc. bridges, 133,729 lin. ft. pipe for irrigation, 1000 gates, 49 manholes; A. Tamm, Engr., Harlingen. 11-7

Tex., Eagle Pass—Maverick County Water Control & Improvement Dist. No. 1 applied to Bd. of Water Engrs. for approval of bonds for combined irrigation and power project; irrigate 60,000 acres, costing approx. \$5,000,000. 9-5

Tex., Galveston—U. S. Engr. Office let contract to Atlantic Gulf & Pacific Co., 15 Park Row, New York, for dredging 1,561,000 cu. yd. in channel, Galveston Harbor to Texas City, at \$80,547.60. 10-24

Va., Hampton Roads, Norfolk—Bureau of Yards and Docks, Navy Dept., Washington, D. C., has low bid from Arundel Corp., Pier 2 Pratt St., Baltimore, Md., for dredging at naval operating base, at 35 cents. 10-24

#### Electric Light and Power

Electric light and power work in connection, with many LAND DEVELOPMENT operations involves the expenditure of large sums of money. See that classification for details.

Ala., Dauphin Island—Bayou Power & Ice Co. and Alabama Power Co., Birmingham, reported, applied to Public Service Comm., Montgomery, to provide electric distribution system.

Ark., Harrison—Arkansas Power and Light Co., Pine Bluff, reported, acquired electric plant and lines of Southwestern Gas & Electric Co., Shreveport, La.

Fla., Dunnellon—Florida Power Corp., St. Petersburg, reported, acquired city power plant.

Ga., Atlanta—City, I. N. Ragsdale, Mayor, install white way on North Ave., W. Peachtree St. to Hemphill Ave.

Mo., Lebanon—Management and Engineering Corp., 327 S. LaSalle St., Chicago, Ill., are engineers and contractors for hydro electric development now being constructed for Central States Power & Light Corp., 327 S. LaSalle St., Chicago, Ill., near here; project will develop 3000 kw. at 40 ft. head and in addition to dam and power house in-

cluding 800 ft. tunnel; construction by company's organization; no contracts let except for materials and small amount of construction equipment. 10-31

Mo., Macon—Missouri Power & Light Co., Bd. of Trade Bldg., Kansas City, reported, negotiating for city electrical distribution system and generating equipment; will erect \$225,000 station.

Mo., St. Louis—Utilities Power & Light Corp., 100 Broadway, N. Y., reported, applied to Missouri Public Service Comm., Jefferson City, for permission to acquire additional stock of Laclede Power & Light Co., 1017 Oliver St., and Laclede Gas Light Co.

North Carolina—Nantahala Power & Light Co., J. E. Thorpe, Calderwood, Tenn., reported, construct railroad from Nantahala station up river to Lookout, just below Aquene, distance of 10 miles; building laborer's cottages at Beecher; lately noted develop hydro-electric plant near Nantahala; acquired plants at Andrews and Robbinsville; plan bringing power from Santeetlah dam in Graham county to Nantahala dam and connecting 2 sources of power; survey underway on Queens Creek. 11-7

N. C., Waynesville—Carolina Power & Light Co., Raleigh, reported, acquired Haywood Electric Power Co., including power development on Pigeon River and distributing lines from plant at Canton and Waynesville.

Oklahoma—State Conservation Comm., Oklahoma City, reported, approved transfer of permit to develop Grand River hydro project in Northeastern Oklahoma, from Wash. E. Hudson, Ritz Bldg., Tulsa, to company to be organized as Grand Hydro Corp., capital \$500,000. W. E. Hudson, Pres., Tulsa; Phil Ball, Security Bldg., St. Louis, Mo., Chrm. Bd. of Directors; engineers now drafting final plans for 4 dams and power plant, capable of developing 400,000 h. p.; master dam 150 ft. high in Mayes County, second dam east of Pryor, third at mouth of Clear Creek and fourth east of Wagoner.

S. C., Rock Hill—Duke Power Co., Charlotte, N. C., reported, erecting power substation near Catawba river; furnish power for operation of water pumping station.

Tennessee—East Tennessee Light & Power Co., (name changed from Tennessee Central Service Co.), subsidiary of Henry L. Doherty & Co., 60 Wall St., New York, reported, authorized by State Railroad and Public Utilities Comm., Nashville, Tenn., to issue \$5,500,000 5½% preferred mortgage bonds, 16,000 shares of no par value preferred stock with \$6 dividend per share and 35,000 shares of no par value common stock; proceeds to be used in acquisition of Bristol Gas & Electric Co., Bristol; Newland Light and Power Co., Newland, N. C.; Electric Light & Power Co., Elk Park, N. C.; Erwin Electric Light & Power Co., Erwin; Butler Light & Power Co., Butler; Roans Creek Light & Power Co. 5-23

Tennessee—Tennessee Electric Power Co., Chattanooga, acquired properties of Southern Cities Power Co., Tennessee Water Co. and Southern States Ice Co., all of Chattanooga, and Public Light & Power Co., 1612 Market St., Philadelphia, Pa., from Southern Cities Utilities Corp., 1612 Market St., Philadelphia, Pa.; Southern Cities Power Co. serves 100 communities in Middle and E. Tennessee with power plant located on Duck River at Columbia and Shelbyville and on Elk River at Estill Springs and Fayetteville. 10-10

Tex., Cleburne—City voted negatively on proposition to construct light plant. 10-17

#### Flour, Feed and Meal Mills

Ky., Maysville—Maysville Milling & Feed Co., capital \$50,000, incorporated; T. A. Duke, R. E. Newell.

Mo., St. Joseph—Famo Feed Milling Co., 429 Cherokee St., constructing grain elevator, planned to permit future installations of mixed feed mill; rein. conc.; 31x32 ft.; equipped with receiving and cleaning machinery; Industrial Engineering Co., Fairfax Industrial Dist., Kansas City, has contract for construction; E. A. Whitney & Sons, Kansas City, for foundation pile driving; Webster Mfg. Co., 1856 N. Kostner St., Chicago, Ill., for machinery and equipment for elevator; Horner and Wyatt, Consult. Engrs., 408 Board of Trade Bldg., Kansas City. 10-24

Tex., Van Alstyne—Taylor Grain Co., Spencer Taylor, changing mill from flour to feed mill; install Bowser hammer mill, capacity 10,000 lbs. ear corn hourly, operated by electricity, 10 ton mixer, etc.; later plan manufacture of sweet feed.

W. Va., Buckhannon—Hyre Feed & Storage Co., incorporated; Laura B. Hyre, J. A. Horentz.

### Foundry and Machine Plants

Mo., St. Louis—Missouri Boiler & Sheet Iron Works, Walter Tolkaes, Pres. and Gen. Mgr., will utilize adjoining property, recently acquired, for enlargement of production of transformer tanks; castings for this work are made on contract.

Tenn., Franklin—Allen Mfg. Co., W. F. Allen, Pres., 300 10th Ave., N., Nashville, receives bids about Nov. 23 for \$200,000 stove plant including office building, 1 story and basement, 80x42 ft., rein. conc. foundations, brick, tile, stucco, hardwood floors, interior mill trim, comp. shingle and tin roof, vault doors; foundry building, 1 and 2 story, 663x121; storage building, 1 and 2 story, 359x288 ft.; storage and toilet building, 31x252 ft., rein. conc., struc. steel truss roof, hollow tile and brick, steel sash and doors, Robertson Protected Metal or corrugated asbestos roof; 150,000 sq. ft. floor space. Following estimating on general contract: Sam N. Hodges Co., Erlanger Theatre Bldg.; A. K. Adams Co., 542 Plum St., N. W.; Wagar & Co., Norris Bldg.; Norwood Griffin, Bona Allen Bldg., all Atlanta, Ga.; Brown Harry Construction Co., Gastonia, N. C.; V. L. Nicholson Co., 102 W. Clinch Ave., Knoxville; S & W Construction Co., 773 Court St.; Gauger Kormo Construction Co., Fidelity Bk. Bldg., both Memphis; T. C. Thompson & Bros., 609 N. Smith St., Charlotte, N. C.; T. S. Moudy Co., Chamberlain Bldg., Chattanooga; Foster & Creighton Co., 4th & 1st Bldg.; Gould Contracting Co., Independent Bldg.; E. G. Holladay & Co., Craighead Ave.; Rock City Construction Co., 150 4th St., all Nashville; Robert & Co., Engr., Bona Allen Bldg., Atlanta, Ga. 10-31

Va., Norfolk—Norfolk Radiator Works, A. C. Martens, 160 W. Olney Rd., let contract to Nichols & Lindemann, for \$25,000 plant, Boush St. extended, bet. High and North St.; 1 story, fireproof of colonial design, brick, limestone trim; Neff & Thompson, Archt., Seaboard Bank Bldg.

### Garages and Filling Stations

Ala., Birmingham—A. S. Klyce, 2020 N. Fifth Ave., let contract to Johnson Construction Co., Martin Bldg., for garage and showroom, Ave. C and 19th St.; stone, struc. steel, conc., fireproof, 2 story, 140x150 ft., built-up roof; Jacob E. Salle, Archt., Empire Bldg. 10-31

Ala., Heflin—Cole Motor Co., Anniston, acquired Heflin Motor Car Co.; W. J. Cole to be manager; company negotiating for similar concerns at Oxford, Anniston, Piedmont, Pell City and Talladega.

D. C., Washington—Taylor-Korman Oil Co., Inc., 1225 K St., N. W., erect filling station, 4717 Wisconsin Ave.; J. H. Abel, Archt., Alban Towers.

D. C., Washington—Ralph W. Bohrer, 5301 Wisconsin Ave., N. W., erect auto truck storage building, 5309 Wisconsin Ave., N. E.; small filling station, 201 H St., N. E.; brick, conc.

Fla., Avon Park—Avon Park Auto Sales, Inc., capital \$10,000, chartered; T. C. Hobbs, W. J. Head.

Fla., Fort Myers—Forehand "Goodyear" Service Station receiving new bids for \$12,000 filling station; 1 story, 32x90 ft., hollow tile, stucco, 2 steel canopies, refreshment stand; N. Gaillard Walker, Archt.

Fla., Gainesville—Adams & Pori Service Stations, Jacksonville, erect \$10,000 bulk plant and service station.

Fla., Gainesville—E. L. Johnson let contract to Winston & Penny for \$35,000 garage; conc. footings, brick, comp. roof, steel sash; John E. Pierson, Archt.

Fla., Miami Beach—Harvey S. Firestone, Ocean Drive, Miami Beach, and Akron, Ohio, let contract to C. O. Byrd, 1268 S. W. 3rd St., for \$15,000 additions and alterations to garage and kitchen; August Geiger, Archt., 58 S. E. 7th St.

Fla., Miami Beach—Firestone Tire & Rubber Co., Akron, Ohio, and Miami, have plans completed about Nov. 15 to 20 for \$30,000 super-service station; 100x140 ft., struc. steel rein. conc., face brick, steel sash, tile or slate and comp. roof, conc. floors; Alexander Lewis, Archt., Spanish Village, Miami Beach.

Fla., Miami—Firestone Tire Stores, Inc., 1071 W. Hagler St., let contract to O'Neill-Orr Construction Co., N. E. Fourth St., for

bulk station, N. W. 24th St. and 29th Ave.; plans by owners.

Fla., Orlando—Firestone Tire & Rubber Co., Akron, Ohio, let contract to John H. Bull, Inc., 1st Natl. Bank Bldg., St. Petersburg, Fla., for service station; Francis J. Kennard & Son, Archt., 303 Zack St., Tampa. 10-10

Fla., Orlando—Standard Oil Co. of Kentucky, 430 W. Bloom St., let contract to A. E. Smith, for filling station; 1 story, 80x100 ft., hollow tile or brick.

Fla., Tallahassee—Trawick Tire Co., capital \$10,000, incorporated; H. B. Trawick, N. Monroe St.

Ky., Benton—Draffen Motor Co., capital \$20,000, incorporated; M. R. Draffen, J. G. Smith.

Ky., Louisville—M. Rauhen, Hearst Bldg., Chicago, Ill., has sketches for \$40,000 garage, rear 744 S. Second St.; 3 story, 57x150 ft., fireproof.

Ky., Paducah—Service Tire Co., capital \$10,000, incorporated; W. D. Payne, Avondale Heights.

Md., Brentwood—J. F. Hogan, 1415 & St. N. W., Washington, D. C., let contract to Kass Construction Co., 1116 Vermont Ave., N. W., Washington, D. C., for \$15,000 filling station, Rhode Island Ave. and Eldredge St.; H. Warwick, Archt., 1116 Vermont Ave., N. W., Washington, D. C.

Md., Cumberland—Cramer Stores, Inc., 110 S. Mechanic St., incorporated; William J. Cramer, Cumberland; R. M. Kimmel, Akron, Ohio.

Miss., Brookhaven—Ed. and Sexton Penn let contract to Lee McDavitt, Brookhaven, for building, S. First St.; 70x80 ft.; to be occupied by Penn auto repair shop, garage and apartment.

Miss., Crystal Springs—C. M. Huber plans soon erecting building, Marion Ave. and Jackson St.; brick; to be occupied by Chevrolet Motor Co.

Mo., Republic—Republic Motor Co., capital \$10,000, incorporated; Arch A. Sloan, Republic.

Okla., Oklahoma City—Kreipke Construction Co., 708 W. Grand St., started erecting \$32,000 service station, 431 W. Second St.; 1 story, 32x140 ft., brick; owner builds.

Tenn., Memphis—Davis Coal Co., 2477 N. Bellevue St., install 3 20,000-gal. gasoline storage tanks, warehouse and 4-car garage, Belt Line R. R., rear McLemore Ave. and Bellevue Blvd.

Tex., Austin—Paul O. Simms, 121 W. 7th St., let contract to Frank Barron, Norwood Bldg., at \$10,310, for garage, Second and Colorado St.; H. F. Kuehne, Archt., Littlefield Bldg. 11-7

Tex., Beaumont—Firestone Tire & Rubber Co., Akron, Ohio, let contract to McDaniel Bros., Kyle Bldg., at \$58,450, for building, Broadway and Main St.; plumbing let to Corbin Plumbing Co.; elec. work, Neches Electric Co.; 85x185 ft., 2 story, conc., brick; equip for complete servicing, washing, greasing and storage and sale of accessories; Carl Markley Tire Co., College and Orleans St., Lessee; Charles S. Chase, Jr., Archt., Post-Dispatch Bldg., Houston. 10-10

Tex., Cuero—C. F. Combs, Ganado, acquired Cook & Day Motor Co., Ford Agency, Esplanade St.; to be known as City Motor Co. 10-24

Tex., Houston—Cities Service Oil Co., 1114 Milby St., leased site, Franklin and La Branch St., for filling station.

Tex., Houston—Aerocar Sales Corp., capital \$10,000, incorporated; S. H. Hearne, Post-Dispatch Bldg.

Tex., Raymondville—Humble Oil Co., Humble Bldg., Houston, has permit for modern filling station, S. Seventh St. and Rodriguez Ave.; brick, stucco, large conc. drive, at least 4 pumps, waiting rooms, etc.

Va., Ashland—Ashland Motor Co., Inc., capital \$25,000, chartered; A. J. Haley.

W. Va., Morgantown—DeLuxe Service, Inc., reported, plans modern filling station and service department.

W. Va., Welch—Welch Motor Co., Inc., capital \$25,000, incorporated; O. J. Hunter, G. W. Howard.

### Gas and Oil Enterprises

Ark., Jonesboro—Arkansas Power & Light Co., Pine Bluff, reported, acquired natural gas franchise of John A. Reed, Cedar Rapids, Iowa; company made survey for laying pipe line between Hoxie and Minturn and pipe gas to Jonesboro; plans expending \$450,000 for extensions and high pressure mains.

Ark., Warren—Arkansas Natural Gas Corp., Ardis Bldg., Shreveport, La., reported, granted gas franchise.

Ga., Savannah—Mexican Petroleum Corp. of Georgia, subsidiary of Pan-American Petroleum & Transport Co., 120 Broadway, N. Y., reported, let contract to Chicago Bridge & Iron Works, 37 W. Van Buren St., Chicago, Ill., for tanks for refinery; J. A. Tison Sons, 725 Whitin St., has contract for grading; S. B. Schapiro, Engr. 10-24

Ky., Hopkinsville—West Kentucky National Gas Co., capital \$30,000, incorporated; Sterling S. Lanier, Jr., John T. Edmunds.

Louisiana—Following towns, Oakdale, E. L. Eldred, Mayor; Opelousas, Dave Hollier, Mayor, New Iberia, O. R. Burke, Mayor, reported, interested in gas supply system from natural gas fields to supply southwest Louisiana towns.

Louisiana—Williams Brothers, Inc., Engrs.-Contrs., 302 S. Cheyenne St., Tulsa, Okla., started construction of series of loop lines for Interstate Natural Gas Co., paralleling their lines from Monroe, La., field to Baton Rouge; loops will be from 5 to 30 miles long and of 22-in. pipe, similar in construction to first line laid; will probably lay 80 miles in all and Williams Bros. are handling construction without sub-contractors, for Ford, Bacon & Davis, Inc., Engrs., 39 Broadway, and representatives of Interstate Natural Gas Co., 26 Broadway, New York.

La., Lake Charles—Shell Petroleum Corp., care of Shell Eastern Petroleum Products Corp., 141 Milk St., Boston, Mass., reported, construct warehouse on E. Broad St.

Miss., Brookhaven—Shell Petroleum Corp., care of Shell Eastern Petroleum Products Corp., 141 Milk St., Boston, Mass., reported, construct steel plant and three 18,000 gal. storage tanks, supply room and office.

Mo., Aurora—Gas Service Co., 60 Wall St., New York, granted 20 yr. gas franchise; town voted 20 yr. franchise to Lawrence County Water, Light & Cold Storage Co., operated by Empire District Electric Co., Joplin; Gas Service Co., construct \$150,000 distribution system in town and complete gas line between Neosho and Springfield; supply gas to Monett, Peirce City, Marionville, Billings and Republic.

Mo., Butler—City Oil & Gas Co., incorporated; W. E. Black, Grover Gilbert.

Mo., Poplar Bluff—Missouri Natural Gas Co., 1017 Olive St., St. Louis, reported filed application for certificate of convenience with State Public Service Comsn., Jefferson City, to erect and operate natural gas distribution plant; construct 4-mile transmission line.

Mo., St. Louis—Laclede Gas Light Co., Laclede Gas Bldg., applied to State Public Service Comsn., Jefferson City, for permission to issue and sell \$5,500,000 first mortgage collateral and refunding bonds. 6-6

Okla., Elk City—City, reported, plans natural gas distribution system; C. A. Wood, Engr., Ferrine Bldg., Oklahoma City.

Okla., Oklahoma City—Head Petroleum Co., incorporated; B. T. Head, 317 West Park St.

Okla., Oklahoma City—Sunray Oil Corp., Exchange Natl. Bldg., Tulsa, reported, acquiring controlling interest in Homaokla Oil Co., Petroleum Bldg., Oklahoma City.

Tenn., Cleveland—Cleveland Gas Co., incorporated; A. J. Goss, Signal Mountain, Chattanooga; install gas system.

Tennessee—Memphis Natural Gas Co., Memphis, reported, applied for charter in Ripley, Covington, Dyersburg and Brownsville; construct 12-in. pipe line from Memphis, 12-in. line from Brownsville and probably to Jackson, including natural gas distribution for Arlington and Stanton; later may add Union City and Newbern to system.

Texas—Texas Corp., 17 Battery Place, New York, reported, filed amendment with State Dept., Dover, Del., for an increase of \$100,000,000 in its capital. 10-17

Texas—Lone Star Gas Co., 1915 Wood St., Dallas, reported, acquired gas rights on 5000 acres in Gray and Wheeler counties, from Continental Oil Co., Hamilton Bldg., Wichita Falls.

Tex., Amarillo—Vulcan Oil & Gas Co., capital \$100,000, incorporated; D. W. Humphreys, Amarillo Bldg.

Tex., Clarksville—Gulf Refining Co., Port Arthur, reported, build structure 205 Main St.

Tex., Corpus Christi—Saxet Gas Co., Nixon Bldg., install gas main from fields west of city.

Tex., Fort Worth—Cochran County Oil Corp., capital \$72,000, incorporated; R. A. Westbrook, 2232 Winston Terrace, West.



Tex., Houston—Houston Gas & Fuel Co., Esperson Bldg., applied for permit to lay feeder line N. Capitol St. to Magnolia Park measuring station.

Tex., Houston—Mykawa Oil Corp., incorporated; R. C. Morris, 903 Rusk St.

Tex., Pecos—Lockhart & Co., reported, making survey for \$100,000 pipe line from Loving County oil field.

Tex., Port Arthur—Stilwell Oil Co., capital \$100,000, incorporated; A. J. LeBlanc, 744 4th St.

Tex., Ranger—Veliwin Gasoline Co., incorporated; R. B. Calvert, C. J. Vollmer.

Tex., San Angelo—Concho Oil Co., capital \$50,000, incorporated; Hugh H. Tucker, Wm. Gruber.

Tex., San Antonio—Gulf Coast Oil Co., incorporated; Wm. F. Morgan, 202 Mary Louise St.

Tex., San Antonio—Grayburg Oil Co., John W. Choate, Mgr., Maverick Bldg., reported, considering erection of \$2,000,000 refinery; surveys completed and preliminary plans in progress; Hope Engineering Co., Engrs., 149 Broadway, New York.

Va., Clifton Forge—Roanoke Gas Light Co., L. J. Turner, Roanoke, reported, applied for gas franchise; build artificial gas plant.

Va., Richmond—Dominion Oil Co., First and Everett Sts., reported, construct 2,000-gal. oil terminal to distribute products of Shell Eastern Petroleum Products Corp., 141 Milk St., Boston, Mass.; cost \$125,000; erect 4 storage tanks from 210,000 to \$40,000 gal. capacity and seven 20,000 gal. capacity; 3 brick buildings, office, warehouse and garage; will be connected with railway dock on James River by 4 pipe lines, 5000 ft. each; loading racks with accommodations for 10 tanks cars at same time; Richmond Engineering Co., 935 Brook Rd., has contract for 7 smaller tanks, Chicago Bridge & Iron Works, Chicago, for larger tanks; E. L. Bass, 708 Bainbridge St., Richmond, has contract for 3 brick buildings; K. L. Black, 1314 Grayland Ave., for excavation work.

Va., South Boston—Columbus Gas and Electric Co., Charleston, W. Va., reported, negotiating for gas franchise; plan laying pipe lines from Kentucky through Martinsville, Danville, with branch line running to Lynchburg; 600 miles of piping; cost of project \$200,000.

### Land Development

Fla., Groveland—Grove & Land Development Co., incorporated; F. G. Garcia, E. A. Acres.

Fla., Miami—Milrod Corp., chartered; H. D. Miller, 3838 N. Bayshore Drive.

Fla., Plant City—Varn Realty Co. increased capital stock, \$25,000 to \$100,000.

Fla., West Palm Beach—Parker-Miller, Inc., chartered; A. E. Parker, 2433 Flagler Drive.

Ga., Macon—W. G. Mangham, 109 Washington St., develop negro subdivision in Pleasant Hill district; install sidewalks, street lights, sewers, water, etc.; construct swimming pool; R. W. Cowan, Engr.

Ga., Trion—Trion Mfg. Co., retained E. S. Draper, Landscape Archt. and Engrs., 1516 E. 4th Ave., Charlotte, N. C., to prepare plans for development of town center.

Mo., Frederick—Catoctin Country Club, John S. Hershey, considering enlargement of golf course.

Mo., St. Louis—Bowman Real Estate & Investment Co., capital \$50,000, incorporated; Samuel Bowman, 5575 Waterman St.

Mo., St. Louis—Mississippi Valley Realty Co., incorporated; George W. Disher, Collins & Manchester Rd.

Mo., St. Louis—Chapman, Cheney Realty Co., incorporated; Z. P. Wilfey, 5275 Westminster Pl.

N. C., Durham—Rockwood Realty Corp., capital \$200,000, incorporated; L. S. Booker.

N. C., Newton—Newton Investment Co., capital \$150,000, incorporated; D. B. Galtner, W. R. Woodward.

Tenn., Chattanooga—Chattanooga & Look-out Mountain Park, Adolph S. Ochs, 308 W. 75th St., New York, reported, plans immediate improvement of park.

Tenn., Chattanooga—Chattanooga Estates Co., Webster T. James, Pres., James Bldg., plans development of Moccasin Bend for truck and flower gardens, nurseries, etc.; install irrigation and shipping facilities; in initial development 100 acres.

Tenn., Chattanooga—Rural Realty Co., incorporated; Estes Kefauver.

Tenn., Memphis—City, reported, plans developing 300 acres in outskirts, Vance Woods, into natural park and recreational center.

Tenn., Tullahoma—Lake Tullahoma Co., reported, closed contract with Wheeler Development Co., Nashville, for development of lake and 400 acres surrounding; C. A. Lowe, Civil Engineer, Chattanooga, completing topographical survey for streets, parks, drive-ways, residence and hotel site.

Tex., Austin—City plans development East Wood into park; install playground equipment, rustic bridges, shelter house; Jac Gub-belle, Park Engr., will supervise work; also improve Barton Springs, build retaining dam, ornamental retaining walls, promenade, etc.

Tex., Falfurrias—Thomas M. Wilson, Du-bach, La., reported, acquired citrus orchard.

Tex., El Paso—F. H. Campbell, F. H. Campbell Investment Co. develop subdivision in Kern Place.

Tex., Houston—University Place Realty Co. increased capital \$25,000 to \$50,000.

Tex., San Antonio—Melody Grove Pecans, Inc., chartered; Slayden Kirksey, 301 Marshall St., San Antonio.

Tex., Sherman—Womack-Henning Construction Co. has contract for lake for Supreme Forest Woodmen Circle, Omaha, Neb.; S. Herbert Hare, Landscape Archt., Huntzinger Bldg., Kansas City, Mo.

Va., Bedford—New River Pole Co., incorporated; D. F. Arlington, Montvale.

W. Va., Wheeling—Stratford Land Co., 1143 Market St., incorporated; M. J. McFadden, 1122 Market St.

### Lumber Enterprises

Ala., Alexandria—Ferd Brenner Lumber Co., ordered roller bearing, 8-ft. band mill with auxiliary equipment from Prescott C. Menominee, Mich.; ordered 7-ft. band saw from W. B. Mershon Co., Saginaw, Mich.; Thrall & Shea, Gen. Contr., Lake Charles. 10-24

Ala., Selma—Sims-Morgan Lumber Co., C. H. Sims, L. W. Morgan and Edgar Sheffield, start erecting plant about Feb. 1, 1930, with own forces; wood floors, steel roof; equipment not purchased. 11-7

Ark., Lincoln—M. R. Tittle and J. L. Zeller acquired interest of C. W. Bain in Lincoln Lumber Co.

Ark., Madison—Clarke-Bernauer Lumber Co., capital \$60,000, incorporated; W. A. Clarke, C. J. Bernauer.

Ark., Waveland—Waveland Lumber Co., incorporated; G. W. Davis, J. Morse.

D. C., Washington—Heehinger Co., Sixth and C Sts., S. W., started erecting \$10,000 lumber and millwork plant with own forces; 60 x 200 and 40 x 200 ft., frame, wood floors, metal roof; install elevator, conveyors, cross-cutting and rip saws, jack trucks; Stanford E. Abel, Archt., Sixth and C Sts., S. W.

Louisiana—Great Southern Lumber Co., Bogalusa, acquired 50,000 acres cut-over land, Livingston Parish.

La., DeWitt—Kellogg Lumber Co., Memphis, acquired E. Sondheimer Co.'s sawmill, including lease on 26 acres, logging railroad and equipment and approx. 2,000,000, Avoyelles Parish.

S. C., Charleston—South Carolina Lumber Co., capital \$25,000, incorporated; R. O. O'Dell, S. O. Blvd.

Tex., Plainview—Foxworth-Galbraith Lumber Co., 501 Washington St., Amarillo, acquired John Maynard Lumber Co.

Tex., Stephenville—W. J. Clay, Pres., Clay Lumber Co., acquired Guthrie Lumber Co. and Stephenville Lumber Co.; will consolidate.

### Mining

Miss., Crystal Springs—Harleston & Womack entered into contract with R. L. Gant to secure mineral rights to sandstone deposits on Gant farm; started grading for railway to connect mine with line of Illinois Central.

N. C., Gastonia—Gaston Granite Co., capital \$100,000, incorporated; H. L. Rutter, Armstrong Apts.

Tenn., Newport—G. C. Buquo, Hot Springs and Marshall, N. C., leased limestone deposits on John Susong Farm, 4 mi. east of here; reported, will install rock crusher with capacity of 2000 tons daily; expend \$50,000.

Tex., Burnet—Simmons & Taylor preparing to begin work on lead mine above Frank Pavett lead mine, Beaver Creek.

Tex., Hockley—Houston Salt Co., Houston, authorized by Blue Sky Commr. John Martin to sell stock up to \$800,000 to develop salt deposit.

Va., Bluefield—Laurel Creek Mining Corp., incorporated; Abe Williams.

### Miscellaneous Construction

Arkansas—See Ky., Hickman.

Fla., Fort Myers—J. L. Lofton Construction Works, P. O. Box 156, construct 2800-lin. ft. sheet steel piling seawall, Lofton's Island; no contracts to be let; J. L. Lofton, Engr., P. O. Box 156. 11-7

Fla., St. Augustine—City has low bid from Peter Kendrick Engineering Co., at \$21,870, for yacht pier and comfort station; postponed award. 10-24

Fla., St. Petersburg—Tampa Bay Causeway & Transport Co., and Bee Line Ferry, Inc., Pt. Pinellas, both St. Petersburg, applied to Railroad Commrs. of Florida for franchise to operate ferry over waters of Tampa Bay, Pinellas Point, Pinellas County, to Piney Point, Manatee County; to be considered Nov. 29. 9-12

Ga., Augusta—Levee Comm., Elroy G. Smith, Herald Bldg., let contract to Clausen-Lawrence Co., 1394 Gwinnett St., for repairing slides on levee from upper end to section opposite business of city. 10-24

Ky., Hickman—U. S. Engr. Office, McCall Bldg., Memphis, Tenn., has low bid from S. K. Jones Construction Co., Memphis, Tenn., for constructing approx. 77,000 cu. yd. earthwork, Reelfoot and Lower St. Francis Levee Dist., near Hickman, and Barfield, Ark.

Ky., Louisville—Inland Waterways Co., 122 S. Fifth St., let contract to H. A. Doll & Co., Lexington Rd., for \$80,000 warehouse, Preston St., and Ohio River; 2 and 3 story, 90 x 230 ft., conc., steel, rein. con. foundation. 10-24

Louisiana—Bd. of State Engrs., 213-15 New Orleans Court Bldg., New Orleans, opens bids Nov. 22 for constructing either of 2 permeable 3-row pile training dykes and 5 standard current retards or 14 standard current retards in Bossier Parish, Red River, left bank, Sunflower-Nicholson Bend; approx. length of 2 training dykes, 2300 lin. ft.; 5 standard current retards, 700 lin. ft.; 14 standard current retards, approx. 2050 lin. ft.

Louisiana—U. S. Engr. Office, foot of Pry-tania St., New Orleans, has following low bids for 9652 lin. ft. wooden revetments on levee in Barataria and Lake Borgne Levee Dist., and for 51,000 cu. yd. earthwork on Alliance Levee extension, Barataria Levee Dist., designated by name, amount, bidder, price bid: Wooden revetment—Jesuit Bend, 2,862 lin. ft., E. W. Gravelot, Pointe a la Hache, \$1.65, government to furnish lumber; Alliance, 2030 lin. ft., J. M. DeFraitres, Inc., Canal Bank Bldg., New Orleans, \$1.44, government to furnish lumber; Pointe a la Hache, 1300 lin. ft., J. M. DeFraitres, Inc., \$1.35, government to furnish lumber; earth-work—Scott & Bress, Maritime Bldg., New Orleans, 18.8 cents per cu. yd.; all bids taken under advisement.

La., Vinton—Paul Ayers, Sol. Ecker and others appointed as committee to confer with Town Council to devise plans for issuing bonds and putting in docks and warehouses.

Md., Baltimore—U. S. Quarantine Station, Office of H. F. White, Custodian, opens bids Nov. 30 for wharf repairs at station.

Md., Cumberland—City, W. L. Rizer, Engr., City Hall, may construct \$80,000 incinerator; 1 story, brick.

Missouri—U. S. Engr. Office, Postal Telegraph Bldg., Kansas City, advises specifications for constructing 10,900 lin. ft. standard pile clump dikes, Missouri River, St. Albans and Centaur Bends, 3.0 mi. from St. Albans, have been rescinded, but will open bids Nov. 18 for constructing about 5600 lin. ft. standard pile clump dikes, Missouri River, St. Albans Bend, about 2.1 mi. from St. Albans. 10-17

Mo., Brunswick—U. S. Engr. Office, Postal Telegraph Bldg., Kansas City, has low bid from Kansas City Bridge Co., Orear-Leslie Bldg., Kansas City, at \$418,864.47, for 8800 lin. ft. standard pile clump dikes and 6000 lin. ft. standard revetment, Missouri River, Grand River Bend, using lumber mattress. 10-10

Mo., Lupus—U. S. Engr. Office, Postal Telegraph Bldg., Kansas City, has low bid from Woods Bros. Construction Co., 132 S. 13th St., Lincoln, Neb., at \$410,826.79, for 12,500 lin. ft. standard pile clump dikes, Missouri River, Lupus Reach, Plow Boy and Eureka Bends. 10-10

Mo., Mine La Motte—Ozark Recreation Club, Jesse Sprague, care Sprague Realty Co., Chemical Bldg., St. Louis, let contract in few weeks for conc. dams creating 2000 to 3000 acres of lakes; F. Rydeen, Engr., Knoblick. 11-7

Mo., St. Louis—U. S. Engr. Office, Postal Telegraph Bldg., Kansas City, has low bid from Woods Bros. Construction Co., 132 S. 13th St., Lincoln, Neb., for constructing 9200 lin. ft. pile clump dikes, Missouri River at St. Charles and Mullanphy Bends, 7 mi. from here. 10-10

Tex., Corpus Christi—U. S. Engr. Office, Galveston, let contract to Geo. H. Belote, Liberty Court Apt. 8, for office, U. S. Reservation; 1 story, 35x64 ft., frame, creosoted post foundation, lattice; W. T. Foreman, Asso. U. S. Dist. Engr., Corpus Christi. 9-19

Tex., Corsicana—City votes Nov. 26 on \$30,000 incinerator bonds.

Tex., Dallas—Texas & Pacific Ry. Corp., E. F. Mitchell, Ch. Engr., completing plans for Good St. subway; plans calling for bids within 30 days. 11-7

Tex., Port Arthur—Channel—See Bridges, Culverts, Viaducts.

Tex., Point Isabel—Ch. of Army Engrs., War Dept., Washington, D. C., approved modification of navigation project at Brazos Island Harbor, costing \$1,700,000; changes position of turning basin from point of Point Isabel, to point immediately south of town.

Tex., San Antonio—City, H. O. Goodson, Mgr., acquired 25 acres and call for bids within 3 or 4 weeks for constructing incinerator, voted over \$23,000 bonds.

### Miscellaneous Enterprises

Ala., Montgomery—Producers Wood Preserving Co., North Montgomery, owned by Ayer & Lord Tie Co., 80 E. Jackson Blvd., Chicago, Ill., and Bond Bros., Louisville, Ky., plans installing unit for colorless creosoting.

Ala., Montgomery—Swift & Co., Moultrie, Ga., advises erect small packing plant, cost not to be \$500,000 as previously noted; main office, Union Stock Yards, Chicago, Ill. 11-7

Ark., El Dorado—Ideal Cleaners & Dyers, Inc., capital \$50,000, chartered; C. B. Wood, C. M. Calhoun.

D. C., Washington—E. P. Hunkel & Co., 488 Maine Ave., S. W., erect \$70,000 rug-cleaning plant, 600 Rhode Island Ave., N. E.; 2 story, brick.

Fla., Green Cove Springs—B. F. Carter and C. C. Bullard, White Springs, reported, leased turpentine rights on 52,000 acres timberland near Green Cove Springs and in Clay and Bradford Counties.

Fla., Kissimmee—Osceola Moss Mfg. Co., incorporated; W. B. Luke, H. Brinson.

Fla., Miami Beach—E. R. Jones Marine Corp., incorporated; E. R. Jones, 721 Lincoln Rd., Robert C. Sims; manufacture motor boats.

Fla., Miami—Wm. Palmer, Jos. Pizzo and Frank Seales, care M. B. Hanson, 3782 Chase Ave., Miami Beach, have permit for \$12,000 auto amusement drive, N. W. Seventh Ave. bet. 24th and 25th St.; B. Kingston Hall, Archt., Miami Beach.

Fla., New Port Richey—Gulf Pine Products Co., incorporated; Rollo Draft, Frank I. Grey; erecting tar and rosin plant to have 10,000 gal. weekly capacity.

Fla., Orlando—E. F. Slayton Co., E. F. Slayton, 525 Howard Ave., expend \$100,000 establishing abattoir, Orange County near here; equipment to include refrigeration and cold-storage plants.

Ga., Atlanta—Graves-Turner Mfg. Co., (Cream Cones), 661 Whitehall St., S. W., let contract to Capitol Construction Co., McGlawn-Bowen Bldg., for \$13,500 warehouse, 581-599 Stephens St., S. W.; 1 story and part basement, 90x111 ft., conc. foundations, brick, built-up and asbestos roof, stone trim, metal doors; Glass & Biggers, Archt., McGlawn-Bowen Bldg. 8-22

Ga., Brunswick—South Camden Turpenite Co., capital \$10,000, incorporated; C. L. McCarthy, C. G. Stewart.

Ga., Macon—William A. Snow, 538 Washington Ave., acquired Moore's laundry; to be known as Snow's laundry; increasing capital, \$50,000 to \$110,000; officers include William A. Snow, Pres.; C. T. Bell, V.-Pres. and Gen. Mgr.

Ga., Savannah—Industrial Electric Co., 114 Bay St., West, has contract for engineering and installing electrical system in plant of Southern Building Products Corp., subsid-

iary of Certain-teed Products Corp., 100 E. 42nd St., New York; Artley Co., Gen. Contr., 504 E. Bay St.; W. G. Will, Co.'s Engr., on ground. 11-7

Ky., Louisville—J. Graham Brown, reported, announced formation of Brown Wood Preserving Co., \$2,500,000 subsidiary of W. P. Brown & Sons Lumber Co., 2531 S. Fourth St., which has acquired 93 acres and started erecting large creosoting plant, Ashbottom Rd., to employ 600 to 700; owns 250,000 acres timber land in South, products from this to be shipped to Louisville for creosoting; Grant B. Shipley, Engr., Koppers Bldg., Pittsburgh, Pa.

Ky., Owensboro—Owensboro Loose Leaf Co., capital \$30,000, incorporated; G. W. Robinson, H. L. Wilson.

La., Jennings—McLeese Publishing Corp., capital \$30,000, incorporated; J. M. McLeese, Ada Patterson; acquired Jeff Davis Parish News.

La., Monroe—American I. G. Chemical Corp., 285 Madison Ave., New York, reported, definitely selected city as site for plant. Company advises: "We have no information regarding Monroe plant." 8-1

La., New Orleans—Chas. Gibert Construction Co., Inc., Canal Bank Bldg., capital \$75,000, chartered; Chas. S. Gibert, Edwin L. Augustine.

Md., Baltimore—White House Baking Co., 316 Kirby Lane, incorporated; Edward J. Leonard, Frederick Brevesh.

Md., Baltimore—Kubitz & Koenig, Engr., Emerson Tower Bldg., preparing plans for plant, Washington Blvd. and Weaver St., for undisclosed owner; 1 and 2 story, brick.

Md., Baltimore—Butler Bros., Frank S. Cunningham, Pres., Randolph and Canal St., Chicago, Ill., distributor of general merchandise, advises, effective Jan. 1, company will be merged with American Wholesale Corp., Jacob Epstein, Pres., 200 W. Baltimore St.; Baltimore house to be operated as division of Butler Bros., serving territory south of Philadelphia and east of Ohio. 11-7

Md., Baltimore—Cloverland Farms Dairy, Windsor Ave. and Monroe St., acquired Timber Grove Dairy, Steeper St., Canton, as of Oct. 1; acquired plant to be used for distributing.

Md., Cumberland—Potomac Glass Co., M. H. Sloan, Pres., drawing plans and will receive bids about Jan. 1 for rebuilding glass plant; 1 and 2 story, brick; \$20,000; private plans. 5-30

Md., Hagerstown—Victor Cooler Door Co., Inc., R. J. Funkhouse, Pres., First Natl. Bank Bldg., E. A. Nichols, let contract to J. B. Ferguson Co., 39 W. Washington St., for \$125,000 plant addition, Frederick St. extended; 1 story, brick; taking sub-bids; owner, Archt.

Mo., Bloomfield—Arkansas-Missouri Gravel Co., capital \$30,000, incorporated; Gilbert C. Hill, Bloomfield; D. D. Hill, Charleston.

Mo., Elsberry—Wells Larmont Mfg. Co., 716 Washington Ave., S. E., Minneapolis, Minn.; St. Louis, and Burlington, Ia., establish glove manufacturing plant to employ 150 to 200.

Mo., Kansas City—Town Crier Food Products, Inc., capital \$50,000, chartered; C. B. Warkentin, Johnson City, Kan.; J. W. Cain, 811 W. 62nd St., Kansas City.

Mo., Kansas City—Holt-Perry & Sanders Co., 2614 E. 15th St., capital \$50,000, incorporated; Sanford Holt, Montgall Hotel; publishing, etc.

Mo., Louisiana—Chamber of Commerce raising \$50,000 to secure location of shoe plant.

Mo., Sedalia—Tullis Ice Cream Co., Sedalia, merged with Weber Ice Cream Co., subsidiary Beatrice Ice Cream Co., 2622 Pine St., St. Louis; install milk condensing plant; J. H. Bagby, Mgr., Tullis plant to become manager of Sedalia interest; J. J. Weber, of Weber Ice Cream Co., to become Gen. Mgr., Jefferson City Div., and will assist in supervising improvements here; equipment in Weber plant, 108 W. Sixth St., to be moved to Tullis plant, 539 Fifth St., while improvements are being made. 10-10

Mo., St. Louis—National Lumberman Publishing Co., Incorporated; Harold F. Hecker, 5926 Clemens St.

Mo., St. Louis—Pralle Bakery Co., 4159 N. Union Blvd., capital \$50,000, incorporated; George G. Fittge.

N. C., Asheville—Asheville Laundry, Inc., capital \$40,000, incorporated; J. J. Nichols, Avon Ave., Lakeview Park.

N. C., Asheville—Plymouth Rock Hatchery, Inc., K. S. Clark, Pres., McIntyre Bldg., has

plans drawn for hatchery with 25,000 egg capacity; hollow tile, conc. floors; Douglas D. Ellington, Archt., Flatiron Bldg.; install brooder batteries and incubator. See Want Section—Miscellaneous. 11-7

N. C., Durham—American Tobacco Co., 111 Fifth Ave., New York, let contract to Fiske-Carter Construction Co., Greenville, for 5 warehouses; \$500,000. 10-24

N. C., Littleton—Littleton Orange Crush Bottling Co., capital \$100,000, incorporated; R. W. Carter, Jr., Mrs. Bena Crocker.

N. C., Salisbury—J. T. Wyatt Millstone Mfg. Co., R. D. 3, Box 10, erect large shed under which to cut millstones.

N. C., Salisbury—North Carolina Newspapers, Inc., capital \$50,000, incorporated; W. H. Jordan, Greensboro; E. W. G. Huffman, Salisbury.

N. C., West Jefferson—Kraft-Phenix Cheese Corp., 400 Rush St., Chicago, Ill., acquired site for \$100,000 plant; plans and construction by company's forces; begin construction now; C. M. Gere, Southern Branch Mgr., Bristol, Va. 8-1

Okla., Henryetta—Pittsburgh Plate Glass Co., Grant Bldg., Pittsburgh, Pa., let contract to Rust Engineering Co., 606 Grant St., Pittsburgh, Pa., for \$45,000 business building; 1 story, brick, steel, rein. conc. 9-26

Okla., Muskogee—DeCamp Consolidated Glass Casket Co., Muskogee Natl. Bank Bldg., started erecting addition to plant by day work in charge of architect; 3 story, 75x150 ft.; H. H. Niemann, Archt. 9-12

S. C., Greenville—Coca Cola Bottling Co., C. H. Yates, erect \$60,000 plant; white pressed brick, red tile roof.

S. C., Greenville—Blancett Co., John C. Wichmann, Pres. and Gen. Mgr., outlined plans for \$300,000 addition to plant, Camp Sevier, 4 mi. from city, manufacturing preparation for bleaching and finishing all kinds of textiles. 1-24

S. C., Summerville—Cooper River Timber Co., subsidiary West Virginia Pulp & Paper Co., 230 Park Ave., New York Central Bldg., New York, acquired timber lands and cut-over lands of J. F. Prettyman & Sons, approx. 60,000 acres; company advises has no plan for operating timber at constructing plant now.

Tenn., Chattanooga—Dixie Sand & Gravel Co., W. H. Klein, V.-Pres., subsidiary of Penn-Dixie Cement Corp., both James Bldg., purchased all-steel towboat, from Howard Shipbuilding Co., Jeffersonville, Ind.; 6 large all-steel barges, 30x130 ft., draw 7 ft. under full load, from Nashville Bridge Co., Nashville, each 650 tons capacity.

Tenn., Chattanooga—Southern Dairies, Inc., Geo. L. Smith, 60 M St. N. E., Washington, D. C., advises not planning erecting plant here at present. 10-31

Tenn., Chattanooga—A. R. Williams, Brainerd Rd. erect \$10,000 ice cream plant; 1 story, brick.

Tenn., Johnson City—General Shale Products Corp., Sam R. Sells, Pres., rebuild burned plant.

Tenn., Memphis—Colonial Baking Co. start work in 2 weeks erecting \$325,000 plant, Cleveland St. and Larkin Ave.; 150x200 ft., stucco on brick; install electrically operated machinery.

Texas—Certain-teed Products Corp., 100 E. 42nd St., New York, reported, plans \$100,000 addition to wallboard mill at Agatite.

Tex., Amarillo—Brite-Lite Signs, Inc., Denver, Colo., establish plant to manufacture Neon lights, to be operated as unit of Williams Sign Co., Ross D. Rogers, V.-Pres. and Gen. Mgr.; to be in operation in few weeks.

Tex., Corpus Christi—Fentress & Marsh, owners of number of Texas newspapers, acquired New Caller Publishing Co., publisher of Corpus Christi Caller.

Tex., Dallas—Verhalen Paper Co., Inc., capital \$50,000, chartered; Walter Verhalen, 3600 Drexel Drive.

Tex., Dallas—Dr. Pepper Co., J. W. Link, Pres., 401 Main St., let contract to Inge Construction Co., Burt Bldg., on cost plus basis, for bottling plant; 82x200 ft., 3 story and basement, flat slab, rein. conc., flat slab roof; buildings, \$175,000; equipment, \$125,000; install 2 complete bottling units, glass lined tanks, distilling equipment, boilers, etc.; excavating for basement; J. A. Pitzinger, Archt., R. O. Jameson, Engr., both S. W. Life Ins. Bldg. 11-7

Tex., Fort Worth—Fort Worth Sand and Gravel Co., Inc., 103 1/2 E. Seventh St., converting capital stock, \$20,000 to 20,000 common no par value shares and \$1,000,000.



Tex., Fort Worth—Fort Worth Sand & Gravel Co., R. K. Hanger, 103½ E. 7th St., increasing capital stock to \$2,000,000.

Tex., Galveston—American Fire & Marine Insurance Co. increasing capital stock, \$600,000 to \$1,500,000.

Tex., Georgetown—Georgetown Bakery Co. organized and acquired Texas Bakery, A. A. Ramsdel, and Sanitary Bakery, John E. Carlson; operate at plant of Sanitary Bakery; enlarge.

Tex., McAllen—Scott Ford let contract to W. E. Crawford for \$10,000 plant, S. Broadway; 50x100 ft., brick, tile, 2 store rooms; Dr. Pepper Bottling Co., Lessee.

Tex., Nixon—Laney Creameries Co., Inc., soon let contract for \$20,000 creamery; to be complete in 60 days.

Tex., San Antonio—Dr. Pepper Co. of San Antonio, subsidiary of Dr. Pepper Co., J. W. Link, Pres., 4505 Fairfax St., Dallas, leased property, N. St. Mary's St. and Dallas St.; install machinery; \$100,000.

Va., Fredericksburg—Following have sub-contracts for transparent paper plant of Sylvania Industrial Corp., 122 E. 42nd St., New York. Elevator doors, Wm. H. Stevens Co.; misc. iron work, Creswell Iron Works; metal partitions, Sanymetal Products Co.; plumbing and drainage, Huffman Wolfe Co.; steel sash, Truscon Steel Co.; hollow tile, Cox Janeway Co., all Philadelphia, Pa.; mill-work, Bush Bros., Royersford, Pa.; hardware, Supplee Biddle Hardware Co.; brick, Roanoke Webster Brick Co., Roanoke, Va.; painting, H. Newton Marshall Co.; roofing, sheet metal, Robertson's Protective Metal and waterproofing, H. H. Ward Co., Chester, Pa.; Kalamine doors and fire doors, Coburn Trolley Track Mfg. Co., Holyoke, Mass.; bolts and lag screws, Fredericksburg Hardware Co., Fredericksburg; Hughes-Foulkrod Co., Gen. Contr., Philadelphia and Pittsburgh, Pa. 9-19

Va., Norfolk—B. F. Martin, Inc., capital \$30,000, chartered; B. F. Martin, 264 Bank St.; linotype composition.

Va., Richmond—American Tobacco Co., 26th and Cary St., and 111 Fifth Ave., New York, opens bids Nov. 18, in Richmond, for cigarette plant, storage buildings, etc., buildings and equipment, reported, cost \$3,500,000; following estimating on general contract—Hunkin-Conkey Construction Co., Hunkin-Conkey Bldg., Cleveland, Ohio; Fiske-Carter Construction Co., Masonic Temple Bldg., Greenville, S. C.; Struck Construction Co., 147 N. Clay St., Louisville, Ky.; Foundation Co., 175 Varick St., New York; Hughes-Foulkrod Co., Schaff Bldg., Philadelphia, Pa.; John W. Cowper Co., State Planters Bank Bldg.; Wise Granite & Construction Co., Inc., American Natl. Bank Bldg.; John T. Wilson Co., Mutual Bldg., all Richmond; J. E. Elrine & Co., Engr., 215 S. Main St., Greenville, S. C. 10-17

W. Va., Charleston—Bon Ton Laundry & Dry Cleaning Co., 1528 Seventh Ave., capital \$25,000, incorporated; W. H. Robinson, L. R. Weaver.

W. Va., Charleston—Kanawha Floral Co., capital \$25,000, incorporated; John A. Parsons, New Kanawha Valley Bank Bldg., operate greenhouses in Union Dist.

W. Va., Piedmont—West Virginia Pulp & Paper Co., 230 Park Ave., New York Central Bldg., New York, George R. Waldleigh, Mgr., Engineering Dept., has under construction \$200,000 water purification plant, with capacity of 10,000,000 to 12,000,000 gal. per day, to insure clean, sterilized water to pulp and paper mill; consists of arrangement of chemical treating, aeration, settling and filtration; Morton C. Tuttle Co., Gen. Contr., Boston, Mass.; majority pumping equipment from deLaval Steam Turbine Co., Trenton, N. J., pumps driven by Westinghouse motors; enlarging and reconstructing mill waste reduction plant, costing approx. \$200,000, consisting of evaporators, burners, rotaries, filters, etc.; construction by company's forces; plans by company's engineers; equipment from Zarema Evaporator Co., Buffalo, N. Y.; Manitowoc Engineering Works, Manitowoc, Wis.; Erie City Boiler Co., Erie, Pa.; Chicago Pneumatic Tool Co., 3635 Iron St., and Oliver United Filters, Inc., 565 W. Washington Blvd., both New York.

### Motor Bus Lines and Terminals

Ga., Athens—Georgia Motor Lines incorporated; Charles W. Brega, Evelyn G. Walton.

Md., Baltimore—Pennsylvania General Transit Co., subsidiary Pennsylvania R. R., Philadelphia, Pa., applied to Public Service Comm. for permission to operate buses

through streets of city and on roads of state in connection with proposed line to Harrisburg, Pa.

Md., Salisbury—Ace Transportation Co., capital \$100,000, incorporated; J. Edgar Hastings, Salisbury; Frank J. Karle, 1412 Ashland Ave., Baltimore; manufacture, own and operate trucks, buses, boats and airplanes, for carrying passengers and freight in Maryland and elsewhere.

Tenn., Nashville—Smith Motor Coach Co., Frederick Smith, Pres., 2210 Dortch Ave., has final plans in progress, to be complete by May 1, for \$165,000 bus terminal, Sixth Ave. and Commerce St.; 2 story and basement, 146x92 ft., rein. conc., struc. steel, brick, terra cotta trim, built-up roof, steel sash and doors; Marr & Holman, Archts., Stahlman Bldg.

Tex., Lamesa—Carlsbad Cavern Stages, Inc., 519 S. First St., C. W. Jones, Pres., Carlsbad, N. M., recently incorporated, will operate buses on routes as follows: El Paso, Tex., to Tatum, N. M., via Carlsbad Cavern, Carlsbad, N. M., and Lovington, N. M., and from Lamesa to Tatum, N. M., via Seminole, Tex., and Hobbs, N. M. 10-21

### Railways

Louisiana—Morgan's Louisiana & Texas Railroad and Steamship Co., and Texas & New Orleans R. R. Co., R. W. Barnes Ch. Engr., both Houston, Tex., authorized by Interstate Commerce Comm. to construct and operate extension of branch line, Terrebonne Parish.

Miss., Meridian—Meridian & Bigbee River Ry. Co., G. M. Neville, Pres., authorized by Interstate Commerce Comm. to issue \$1,500,000 first mortgage bonds; has authority to construct 50-mi. line, Meridian to Myrtlewood, Ala., to connection with Louisville & Nashville; 30 mi. completed and in operation; plan completing remainder in 1930; construction by Southern Finance & Construction Corp.

Mo., St. Louis—Missouri Pacific R. R. Co., W. A. Hopkins, Gen. Pur. Agr., reported, authorized purchase of 61,000 tons 110-lb. and 90-lb. rail, costing about \$6,000,000, including fastenings, rails from Illinois Steel Co., Chicago, Ill., and Tennessee Coal Iron & Railroad Co., Birmingham, Ala., subsidiaries of United States Steel Corp., 71 Broadway, New York; Bethlehem Steel Corp., Bethlehem, Pa.; Inland Steel Co., and Colorado Fuel and Iron Co., Denver, Col.; authorized purchase of 5 mountain type locomotives and 25 freight locomotives, costing about \$22,750,000; 1,250 50-ton box cars and 1,000 70-ton hopper cars, at about \$4,750,000; 10 parlor cars, 6 diner parlor cars, 3 club dining cars, 35 steel underframe cabooses and other equipment to cost about \$1,356,350.

Mo., St. Louis—St. Louis-San Francisco Ry. Co., B. T. Wood, V-Pres. and Ch. Pur. Officer, will purchase 30 locomotives of 2-8-2 type, to have 27- by 32-in. cylinders, total weight in working order, 356,000 lbs.

Tenn., Nantahala—Nantahala Power & Light Co., subsidiary of Aluminum Co. of America, Oliver Bldg., Pittsburgh, Pa., reported, preparing to build railroad, Nantahala, on Murphy Division of Southern, to Lookout, just below Aquone, 10 mi., in connection with power company's hydro-electric development near Aquone, for transporting building materials.

Tenn., Nashville—Nashville, Chattanooga & St. Louis Ry., J. L. Woods, Pur. Agt., ordered five 4-8-4 type locomotives from American Locomotive Co., 30 Church St., New York.

Texas—Chicago, Rock Island & Pacific Ry. Co., F. D. Reed, V-Pres. and Gen. Pur. Agt., Chicago, Ill., will purchase 40 locomotives of 4-8-4 type, 26- by 32-in. cylinders, total weight in working order, 438,000 lbs.

Tex., Abilene—Abilene & Eastern Ry., Frank Kell, Pres., Wichita Falls, has charter approved by Attorney General R. L. Bobbitt, for constructing line, Abilene to Cross Plains. 11-7

Tex., Matador—Quana, Acme & Pacific Ry. Co., C. H. Sommer, Pres., St. Louis, Mo., authorized by Interstate Commerce Comm. to construct and operate 15-mi. extension from Matador, Motley County. 8-29

Tex., San Angelo—Gulf & West Texas R. R., R. W. Morrison, Pres., 239 W. Mistletoe St., San Antonio, authorized by Railroad Comm. to construct line, San Antonio to San Angelo, approx. 234 mi.; permit pending with Interstate Commerce Comm. 6-6

W. Va., Chaffee—Western Maryland Ry. Co., H. R. Pratt, Ch. Engr., Baltimore, Md.,

authorized by Interstate Commerce Comm. to acquire Chaffee R. R., C. T. McCormick, Sec. and Treas., U. S. Bank Bldg., Johnstown, Pa., extending, Chaffee, W. Va., to Vindex, 3½ mi. 7-18

### Railway Shops and Terminals

Mo., Joplin—Missouri Pacific R. R. Co., E. A. Hadley, Ch. Engr., St. Louis, let contract to Roberts & Schaefer Co., 400 N. Michigan Ave., Chicago, Ill., for 50-ton capacity conc. track hopper in connection with electric locomotive coaler.

Mo., Orangeville—Pennsylvania R. R., E. B. Temple, Ch. Engr., Eastern Region, Philadelphia, let contract to Roberts & Schaefer Co., 400 N. Michigan Ave., Chicago, Ill., for automatic electric elevating equipment to modernize present coaling station.

Mo., Sedalia—Missouri Pacific R. R. Co., E. A. Hadley, Ch. Engr., St. Louis, erecting spring shop; 51x151 ft., conc. foundations, steel frame, corrugated asbestos siding, cement tile roof, steel sash, steel rolling doors, steam heat; following have sub-contracts: Cement, electric wiring, standard paints, clinders, etc., by owner; steel and iron work, Chester Iron & Foundry Co., 7800 Vulcan St.; corrugated asbestos siding, Johns-Manville, 1705 Locust St.; steam heating, John Gilmore Plumbing Co., 13 N. 10th St., all St. Louis; cement tile roof, Federal Cement Tile Co., 608 S. Dearborn St., Chicago, Ill.; steel rolling doors, Geo. W. Johnson Mfg. Co., 209 W. 17th St., Kansas City; T. H. Johnson, Gen. Contr., Sedalia. 11-7

Tex., Wills Point—Business interests, including several large oil companies, promoting organization of company to construct railroad, Wills Point, through new oil field, to Palestine, 77 mi., intersecting Texas & Pacific at Wills Point; negotiating with Missouri Pacific R. R. Co., E. A. Hadley, Ch. Engr., St. Louis, Mo., with view of interesting company in line.

West Virginia—Pennroad Corp., subsidiary of Pennsylvania R. R., E. B. Temple, Ch. Engr., Eastern Region, Philadelphia, Pa., acquired Pittsburgh & West Virginia Ry. Co., H. H. Temple, Ch. Engr., Pittsburgh, Pa.

W. Va., Wheeling—O. P. and M. J. Van Sweringen interests, Cleveland, Ohio, authorized by Interstate Commerce Comm. to issue, through New York, Chicago and St. Louis R. R. Co. (Nickel Plate), \$20,000,000 promissory notes to acquire controlling stock of Wheeling and Lake Erie Ry. Co., W. M. Duncan, Chmn. of Bd., Cleveland, Ohio.

### Roads, Streets and Paving

In connection with LAND DEVELOPMENT large sums are expended for roads, streets, paving and sidewalks. Details will be found under that classification.

### Proposed Construction

Ala., Montgomery—City Comm., W. A. Gunter, Jr., Mayor, considering approx. 1 mi. sidewalk on Fairview Ave., South Court St. to Narrow Lane road; considering paving Woodley road, Cloverdale road to Narrow Lane road; curb and gutter from Cloverdale to Woodley Terrace; 20 to 24 ft. probably asphalt strip, from Woodley Terrace to Narrow Lane road; J. M. Garrett, City Engr.

Ala., Selma—City, R. M. Watters, Chk., considering conc. curb on Range St., Jeff Davis to First Ave.; and Mechanic St., from Water to Jeff Davis Ave.; W. O. Crisman, City Engr.

Ark., Fayetteville—City plans expending about \$11,900 to pave with conc., Scott St., and Watson Ave.; E. M. Ratliff, Engr.

Ark., Little Rock—City, Horace A. Knowlton, Chk., considering establishing Street Improvement Dist. No. 508, to provide new route to Pulaski Heights, via Cross, Valley, Martin, O and Q St., Lincoln Ave. and Centrell road, connecting at city limits with Joe T. Robinson Highway; estimated cost \$550,000.

Ark., Pine Bluff—State Highway Comm., Little Rock, approved plans to reroute Arkansas-Louisiana Highway No. 65 through Pine Bluff via Sixth-Fifth-Ohio St., contingent on city, Harry L. Holderness, Mayor, paving West Sixth St. to city limits from Spruce, Fifth St. east from Spruce and Ohio St. south from Fifth St. to city limits; Chris Wright, City Engr.; R. E. Lee, City Chk.

Arkansas—State Highway Comn., Little Rock, receives bids Nov. 20 for 3 roads: Stone County—12 m. gravel surface, Mountain View East and West road, State Highways No. 14 and 64, from near Rocky Bayou to point west of Sylamore Creek or west of Mountain View; 12,535 cu. yd. gravel surface course material; Johnson County—11½ m. grading, draining, Clarksville-Russellville road, State Highway No. 64, from point east of Clarksville to Piney Creek Bridge, near Piney Ark.; 107,110 cu. yd. excavation and borrow, 129,595 lb. rein. steel; C. S. Christian, State Highway Engr.

Arkansas—State Highway Comn., Little Rock, receives bids Nov. 20 for 2 roads: Pope County—12 m. burnt shale surface, Russellville-Caglesville road, State Highway No. 124, 9,203 cu. yd. shale surface course; Searcy County—½ m. grading, draining, Buffalo River Bridge approaches, State Highway No. 65, 22,895 cu. yd. excavation and borrow; Dwight H. Blackwood, Chmn.

Fla., Pensacola—City Comms., J. Harvey Bayliss, Mayor, considering \$300,000 street paving project in eastern section of city.

Fla., Titusville—Brevard County Comms., A. W. Donaldson, Commr. receive bids soon for 15-ft. road, from Shiloh to Allenhurst on Merritt Island, connecting with road from Titusville to Palafalinda Beach.

Ga., Quitman—Brooks County plans paving 2 roads: Standard cement road from Quitman to Dixie; resurface Madison Highway from Quitman to Florida line.

Louisiana—State Highway Comn., Baton Rouge, receives bids Dec. 10 for 2 roads on Old Spanish Trail: Orleans Parish—8.4 m. Chef Menteur-Rigolets Highway; St. Tammany Parish—14.6 m. Rigolets-Pearl River Highway; H. B. Henderlite, State Highway Engr. 10-3

Louisiana—Louisiana Highway Comn., Baton Rouge, received low bids for 9 roads, 3 bridges and approaches: Claiborne Parish—6.810 m. conc., Homer to Minden, A. C. Campbell, Winnfield, \$155,417; Jackson Parish—2.7 m. conc., Jonesboro to Hodge, Hartman and Clark Bros., Peoria, Ill., \$77,174; Lafourche Parish—4.961 m. conc., Thibodeau to Raceland, Davis Construction Co., Walton Bldg., Atlanta, \$99,389; LaSalle Parish—4.512 m. conc., Jena to Trout, Robert G. Lassiter & Co., Citizens Bank Bldg., Raleigh, \$113,065; Natchitoches Parish—7.993 m. conc., Powhatan to Natchitoches, Davis Construction Co., \$175,937; Avoyelles Parish—2.315 m. grading, draining, Shirley to Bunkie, Alexandria Contracting Co., Alexandria, \$16,330; Bienville and Red River Parishes—9.764 m. grading, draining, Lockwood to Niock, Herrin, Andrews and Herrin, Baton Rouge, \$73,517; Orleans Parish—2.144 m. hydraulic fill and drain structures, on approach to Chef Menteur Bridge, McWilliams Dredging Co., New Orleans; \$244,513; Rapides Parish—11.155 m. draining, grading, Moreland to Meeker, Alexandria Contracting Co., \$49,214; Bridges: Natchitoches Parish—creosoted pile bridges between Creston and Ashland, Harvey & Jones, Memphis, \$12,240; Claiborne Parish—creosoted pile bridges, Lisbon to Bernice, Harvey & Jones, \$12,704; Richland Parish—steel truss span and approaches over Boeuf River, Ed Pettus, Montgomery, Ala., \$70,433; H. B. Henderlite, State Highway Engr. 10-17

La., Lake Charles—City, J. E. Johnson, Commr. of Streets and Parks, plans receiving bids soon for about 13 blocks paving in residential section; permanent paving on Reid, Sixth, Hendrick, Pine and Eleventh St.

La., Lake Charles—Calcasieu Parish Police Jury plans graveling road from Opelousas St. to Chloe, connecting with Old Spanish Trail, being permanently paved.

La., Natchitoches—City, O. F. Himel, Sec. Treas., receives bids Nov. 26 to grade and gravel 4 roads and streets, including Amulet St., Old Robeline road; 3000 cu. yd. excavation; V. G. Hyams, Engr.

Md., Baltimore—City, Bd. of Estimates, authorized repaving Fayette St., Gay to Fallway; Harford road, Baltimore & Ohio R. R. to Alameda; \$36,300; Nathan L. Smith, Highways Engr.

Md., Baltimore—City, Wm. F. Broening, Mayor, plans opening and widening Pear St. to 50 ft., from Preston to Camel St.; widen Camel St. to 50 ft., Pear to Etting St.; open and widen Etting St. to 50 ft., Preston to Campbell; widen Preston St., Druid Hill to Argyle Ave., all in connection with elimination of "lung blocks," and for addition to Negro School and playground park; Chas. F. Goob, Ch. Engr.

Md., Towson—State Roads Comn., G. Clinton Uhl, Chmn., Baltimore, receives bids Nov. 19 for 1.01 m. conc. combination curb

and gutter, and drainage, Frederick road, Baltimore City line to Bishop's Lane; L. H. Steuart, Sec.

Miss., Meridian—City, W. H. White, Clk. Treas., considering expending \$131,770 for grading, paving, curbs and gutters on various streets. See Financial News Columns.

Miss., Mount Olive—Town, Mayor and Bd. of Aldermen, considering paving sidewalks on various thoroughfares.

Miss., Poplarville—City, E. H. Hyde, Mayor, considering about 4 m. paving, including all state highways running through city and municipal thoroughfares.

Miss., West Point—Clay County considering expending \$375,000 for north and south, east and west roads. See Financial News Columns.

Mo., Carthage—City plans paving North Garrison Ave., from new State Highway No. 71 viaduct to Vine St.

Mo., New London—City plans expending \$25,000 toward paving main street; State Highway Dept., Jefferson City, will pave strip 20-ft. wide; city will complete strip to 40 ft. with curb and gutter. See Financial News Columns.

Mo., Southwest City—Prairie Special Road Dist., McDonald County will purchase right of way on Highway No. 90, in Dist. for 8½ m. road, which State will build. See Financial News Columns.

Mo., St. Louis—City, Bd. of Public Service, receives bids Dec. 3 to improve McCausland St., Lindenwood Place to Lansdowne; Vera St., Florissant to Euclid, Florissant Heights; W. W. Horner, City Engr.

Mo., St. Louis—City, Bd. of Public Service, plans expending \$500,000 to pave 4 streets with Warrenite bitulithic; 8 streets with asphalt; 2 with amiesite and 4 with conc.; W. W. Horner, City Engr.

North Carolina—State Highway Comn., Raleigh, receives bids Dec. 17 for 9 roads and bridge: North Hampton County—approaches to Weldon Bridge and grading and draining, Garysburg to Route 48; Onslow County—12 m. sand asphalt, Route 23, Jacksonville to Richlands; Robeson County—11.22 m. sand asphalt, Route 201, Lumberton to Bladen County line; Granville County—9 m. dirt, Route 57, Oxford to Berea; Guilford County—rebuild 3 m. present macad., Route 704, Summerfield to Ogburn Cross-Roads; Moore County—7 m. grading, paving, Route 74, Carthage to intersection of Route 702; Rockingham County—12 m. approach fills at Madison; Stanly County—5.1 m. dirt, Route 62, New London to Yadkin River; McDowell County—11.2 m. dirt, Route 19, Marion to Rutherford County line; Gaston County—overhead bridge at High Shoals; John D. Waldrop, State Highway Engr.

N. C., Durham—Durham County Comms. plan opening, improving and maintaining Pine St. extension road, from city limits to Cornwalls road.

N. C., Hickory—City Council receives bids Nov. 19 for 5000 sq. yd. sidewalk paving in various sections.

Okla., Oklahoma City—City, E. M. Fry, Mgr., received low bid from M. A. Swatek Co., 519½ W. Main St., at \$248 per yd. for conc. paving on Thirteenth, Fourteenth, Forty-fourth St., Harvey, Virginia Ave.; created 4 new paving districts, including Twenty-first, Seventeenth, and Twenty-seventh St., Eubank Ave.; W. W. Small, City Engr.

Okla., Ada—State Highway Comn., Oklahoma City, approved appropriation for graveling State Highway No. 12, Ada to Allen, Pontotoc County; plans grading and draining Highway No. 12, Ada to Roff; George Toler, Res. Engr.

Okla., Oklahoma City—City, E. M. Fry, Mgr., considering lowering grade of Harvey Ave., 3 ft., from Third to Fourth St.; W. W. Small, City Engr., prepared plans; cost about \$17,925.

Okla., Tulsa—City Comms., Dan. W. Patton, Mayor, plan paving Marshall St. 26 ft. wide; K. R. Teis, City Engr.

Okla., Tulsa—City, Dan W. Patton, plans paving Oklahoma St., Frankfort to Hartford Ave., estimated cost \$12,555; Thirteenth St., Harvard to Jamestown, \$9,775; considering paving Boston Place, Reservoir Hills addition to Winterview Heights addition, and 8 districts in Forest Hill addition; K. R. Teis, City Engr.

S. C., Chester—State Highway Dept., Charles H. Moorfield, Engr., Columbia, making survey for paving Calhoun Highway from Broad River to Chester.

S. C., Gaffney—Cherokee County Comms., E. L. Gossett, Clk., will let contract for 4 m. Gaffney to Shelby, N. C., highway, from Stacy Ferry Bridge over Broad River to North Carolina line.

Tenn., Chattanooga—City, E. D. Bass, Mayor, plans expending \$573,000 for widening Cherry St., Eighth to Ninth and Seventh to Fourth; will sell bonds.

Tenn., Knoxville—City, Geo. Dempster, Mgr., receives bids soon to asphalt Gay St., Commerce to Vine St.; W. W. Mynatt, Dir. of City Service.

Texas—State Highway Comn., Austin receives bids probably Nov. 25 or 26 for 6 roads: Brown County—10.331 m. grading, draining, Highway No. 129, from point east of Brownwood to Eastland County line; Leo, Ehlinger, Res. Engr.; Kerr County—10.678 m. crushed stone base, double bit. surface treatment, Highway No. 41, Sta. 617 plus 60 to Mountain Home; S. K. Mason, Res. Engr.; Medina County—3.795 m. grading and underpass on Highway No. 3, D'Hanis to end of Federal Aid Project No. 270-D; H. P. Stockton, Div. Engr., 716 Maverick Bldg., San Antonio; Anderson County—7 m. grading, draining, Highway No. 19, Elkhart to Houston County line; C. H. Kendall, Res. Engr.; Hudspeth County—7.196 m. grading, draining, Highway No. 1, Pasca to Sierra Blanca; J. W. Carter, Res. Engr.; San Patricio County—10.445 m. grading, draining, Highway No. 128, Sta. 97 plus 28.4 to Sinton; B. F. Collins, Res. Engr., Mathis; Gibb Gilchrist, State Highway Engr.

Texas—State Highway Comn., Austin, receives bids, probably Nov. 25 or 26, for 13 roads: Childress County—9.204 m. grading, draining Highway No. 4, Childress to Red River, S. D. Bacon, Res. Engr.; Motley County—19.5 m. grading, draining Highway No. 28, Matador to Cottle County line; E. W. Mars, Res. Engr.; Grayson County—7.894 m. grading, draining Highway No. 5, Sta. 577 plus 53 to Sherman; W. D. Dockery, Res. Engr.; Waller County—4.257 m. rein. conc. Highway No. 73-A, Hempstead to Brazos River; H. G. Haynes, Res. Engr.; Matagorda County—12.544 m. rein. conc. Highway No. 58, Colorado River to Elmaton; E. N. Gustafson, Res. Engr.; DeWitt County—8.785 m. 5-in. compacted gravel and 8-in. crusher run broken stone base course, triple bit. top, Highway No. 109, Yoakum to Hochheim; W. H. Koether, Res. Engr., Yoakum.

In Caldwell County—5.688 m. grading, draining Highway No. 80, Fentress to Precinct No. 3 line; Don L. Hook, Res. Engr., Fentress; Guadalupe County—7.306 m. grading, draining Highway No. 3-A, Seguin-Kingsbury-Luling road, from point east of Kingsbury to San Marcos River; Capt. A. Schafl, Res. Engr.; Refugio County—11.284 m. grading, draining Highway No. 113, Tivoli to Victoria County line; R. E. Killmer, Res. Engr.; Mitchell County—549 m. grading, draining, conc. approaches to underpass at Loraine on Highway No. 1; S. C. Dougherty, Res. Engr., Sweetwater; Sterling County—19.915 m. grading, draining Highway No. 9, Sterling City to Glasscock County line; T. J. Kelly, Res. Engr., San Angelo; Brazoria County—13.186 m. grading, draining Highway No. 36, Fort Bend County line to West Columbia; Waller County—7.149 m. grading, draining Highway No. 20, Brazos River to Hempstead; H. G. Haynes, Res. Engr.; Gibb Gilchrist, State Highway Engr.

Tex., Angleton—Brazoria County, Scott Gaines, Judge, plans expending \$3,500,000 to pave 4 highways with conc.; Highway No. 19, Houston-Angleton-Freepoint route; Highway No. 35, Telephone road, Houston to Alvin; Highway No. 36, Rosenberg, through Damon and West Columbia to gulf; Highway No. 58, Hug-the-Coast Highway; also extend lateral road system. See Financial News Columns.

Tex., Amarillo—City, W. N. Durham, Mgr., plans paving Buchanan St., Twenty-second Ave., and East Third St.

Tex., Breckenridge—Stephens County Comms. plan widening northern loop of Bankhead Highway through county; plan selling bonds.

Tex., Canton—State Highway Comn., Austin, probably receive bids soon for 18-ft. conc. slab, State Highway No. 80, Van Zandt County, through Grand Saline; County Comms. Court authorized expenditure of \$200,000 for work.

Tex., Colorado—City Council plans 11 additional blocks paving on Chestnut St. and 3 blocks on Hickman St.

Tex., Corsicana—City Comn. plans expending \$50,000 for street improvement. See Financial News Columns.



Tex., Dallas—Dallas County, Charles E. Gross, County Auditor, receives bids Nov. 25 for about 1/4 mi. conc., Hutchins road, across Five-Mile bottom; Rollins & Clinger, Engrs.

Tex., Dallas—Dallas County, Charles E. Gross, County Auditor, receives bids Dec. 5 for earthwork, draining, and paving Bachman's Dr., from Northwest Highway to Missouri-Kansas-Texas R. R. at Recreation Stop; earthwork, draining, from Recreation Stop to Northwest Highway; Rollins & Clinger, Dist. Engrs.

Tex., El Paso—El Paso County, E. B. McClintock, County Judge, plans expending \$300,000 for levee road improvement; \$200,000, for Upper Valley road; \$50,000, airport road. See Financial News Columns. 10-10

Tex., Fort Worth—Damon Davis, Tarrant County Engr., submitted plans to M. C. Welborn, Res. Engr., State Highway Dept., Austin, for Jacksboro Highway from Lake Worth to Parker County line; eliminate turns and angles in present road and reduce distance 18.62 mi. to 16 mi. from Belknap to county line.

Tex., Fort Worth—State Highway Comm., Austin, receives bids Nov. 25 for 8.24 mi. asphalt seal coat surfacing, Highway No. 10, Tarrant County; John Mead, Div. Engr.

Tex., Fort Worth—City, O. E. Carr, Mgr., plans paving Calmont St., Neville to Merrick; East Arlington Ave. Evans to New York Ave.; receives bids soon to pave Richmond Ave. and Bedell St., Victory to Hampshire Blvd.; plans paving Pruitt St., Lake St. to Sixth Ave.; D. L. Lewis, City Engr.

Tex., Houston—City, W. E. Monteith, Mayor, received low bid from National Paving Co., 112 Buffalo St., \$21,964, for permanent pavement on Southmore St., Burkett to International-Great Northern tracks. 9-19

Tex., Houston—City Council, Fred W. Turner, City Sec., receives bids Dec. 2 to pave Yale St., 42 ft. wide, Washington to Twenty-second; \$198,000, asphaltic conc.; \$229,000, conc. base, brick topping; H. L. Shaw, City Engr. 10-10

Tex., Marfa—Presidio County Commrs. Court plans expending \$600,000 to pave roads through county, from Brewster County line to Jeff Davis County, east to west, and from Rio Grande on south to Jeff Davis County, on north; also build and maintain lateral roads. See Financial News Columns.

Tex., Marshall—State Highway Comm., Austin, plans 8-in. gravel base on Highway No. 8, from north of viaduct to Marion County line; Gibb Gilchrist, State Highway Engr.

Tex., Raymondville—Willacy County Surveyor Frank Epton completed surveys of New Legion Beach project on King Ranch; plans grading.

Tex., San Antonio—City, Paul Steffler, Street Commr., will soon begin extension of North Alma St., Apple to Cunningham; \$10,000 available; I. Ewig, City Engr.

Tex., San Antonio—City Comm., C. M. Chambers, Mayor, approved engineer's report, etc., to pave Bailey Court, Castille St. and Hildebrand Ave.; Comm. authorized expending \$54,725 to pave Hildebrand Ave., Blanco to Fredericksburg road; I. Ewig, City Engr.

Tex., San Benito—City plans grading road from Highland School, and Landrum Park road.

Tex., Texline—State Highway Comm., Austin, plans improving roads in and near Texline, Dallas County; Gibb Gilchrist, State Highway Engr.

Tex., Wheeler—State Highway Comm., Austin, will make surveys of Highway No. 4, 75 and 33A preparatory to building in Wheeler County; Gibb Gilchrist, State Highway Engr.

Va., Arlington—State Highway Comm., Richmond, received low bid from John H. Olcott, Clarendon, Va., \$71,990, for 1.9 mi. rock asphalt paving Route 31, from Arlington, Arlington County, to Dist. line. 10-31

Va., Richmond—City, J. Fulmer Bright, Mayor, plans expending \$24,000 to widen Lafayette St., Broad St. to Grove Ave.; R. Keith Compton, Dir. of Public Works.

W. Va., Beckley—Raleigh County plans expending \$62,000 for road building in Harper Road Dist. See Financial News Columns. 10-10

W. Va., Madison—Road—Boone County, C. H. Nelson, Clk., plans expending \$93,500 for roads. See Financial News Columns. 10-10

W. Va., Parkersburg—Wood County Commrs. plan expending \$93,500 for roads in Washington Road Dist. See Financial News Columns.

W. Va., Spencer—Roane County Court R. L. McCutty, Clk., plans expending \$62,500 for road building. See Financial News Columns. 10-3

#### Contracts Awarded

Alabama—State Highway Comm., Montgomery, let contract for 2 roads and 11 bridges totaling \$324,069; Conecuh County—11.62 mi. cement conc., from intersection of Evergreen-Monroeville road, southward, via Castleberry to Escambia County line; Davis Construction Co., Walton Bldg., Atlanta, Ga., \$184,907; Macon County—gravel surface road, between Notasulga, Macon County and Auburn, Lee County, B. F. Cosby, Dadeville, \$37,636; conc. and creosoted wood bridges; Greene County—bridges between Eutaw and Demopolis, W. D. Goodwin, Montgomery, \$17,777; Etowah County—bridges between Goodyear and Piedmont, S. P. Cook, Fairmont, Ga., \$8,208; Clarke County—8 bridges between Whitley and River Bridge, near Claiborne, G. A. Thomason, Macon, Ga., \$71,084; Macon County—bridges, Tuskegee to Notasulga, Jim Graham, Montgomery.

Ark., Russellville—Grady Garms, Rector Bldg., Little Rock, started building 4 1/2 mi. highway from Delaware Creek to Dardanelle; H. C. Sellers, Dist. Highway Engr.

Ga., Thomaston—E. H. Kemp, Thomaston, has contract, \$20,000, for sidewalks, curb and gutter in mill village of B. F. Goodrich Tire & Rubber Co.; 6930 sq. yd. conc. sidewalks, 22,000 lin. ft. curb and gutter.

Louisiana—Louisiana Highway Comm., Baton Rouge, let contracts for 2 roads and 8 bridges: Pointe Coupee Parish—1 mi. emergency levee road, Myrtle Grove Highway, John P. Burgin, S. Baton Rouge; St. Charles Parish—1/2 mi. highway along Gypsy levee, Laiche & Miller, Morganza, \$5,768; Vernon Parish—8 bridges on Evans-Burris Highway, Newson Bros., Columbia, Miss., \$12,661.

La., Alexandria—Comm. Council, V. V. Lamkin, Mayor, let contract to Mills Engineering Construction Co., Alexandria, to pave with rein. conc., Gould Ave., Levin to Louisiana Ave., 16,577 sq. yd. rein. conc.; and Ninth St. with rein. conc., Jackson to Beauregard; L. W. Sylvester, City Engr. 10-31

La., Independence—Town, Ivy N. Stafford, Clk., let contract to Nelson Brothers, \$60,810 for about 17 blocks, 18-ft. wide conc. paving; E. G. Freller, Engr., Hammond. 10-24

La., Monroe—City Council, P. A. Poag, Sec., let contract to M. Hyman, Monroe, to pave with sheet asphalt, Thomas St., Grand Ave. to Missouri right of way, and from Wilson St. to Missouri right of way.

La., Opelousas—City, John M. Prescott, Clk., let contract to Standard Construction Co., Hammond, \$31,097, to pave with conc., Main St., Jefferson to Church. 10-24

Miss., Winona—Montgomery County Highway Comm., Road Dist. No. 4, let contract to Nixon & Phillips, 917 6th Ave., N., Birmingham, Ala. to gravel 12 mi. 12-ft. wide road; B. J. Lindsay, County Engr. 10-24

Mo., Ferguson—City, Bd. of Aldermen, S. G. Case, City Clk., let contract to Montrey & Reed, 430 Harrison Ave., for sidewalks on Tiffin Ave.

Mo., Humansville—City, J. M. Bradbury, Clk., let contract to Easley Bros., Aurora, Mo., \$22,753, for 6 blocks of paving.

Okla., Altus—City let contract to Highway Construction Co., American Bank Bldg., Tulsa, for conc. paving; estimated cost \$80,000. 10-3

Okla., Clinton—City, W. A. Shouse, Clk., let contract to Connelly Bros., El Reno, for paving in Dist. No. 36.

Okla., Oklahoma City—City, E. M. Fry, Mgr., let contract to M. A. Swatek Construction Co., 519 1/2 W. Main St., \$21,000, for 5,700 sq. yd. 7-in. conc. paving, W. Fourth St. and Klein Ave.

Okla., Tulsa—City, Dan W. Patton, Moyer, let contract to Porter Construction Co., Lewis St. and Frisco tracks, at \$9,425, for paving in Dist. No. 985; at \$3,347, in Dist. No. 986; at \$13,399, for Dist. No. 987; K. R. Teis, City Engr.

Okla., Tulsa—City, Dan W. Patton, Mayor, let contract to Porter Construction Co., Lewis St. and Frisco tracks, \$22,983 to pave Nineteenth St. and Evanston Ave.; K. R. Teis, City Engr. 10-24

Tennessee—Dept. of Highways and Public Works, Nashville, let contracts for road and 2 bridges: Rhea-Cumberland Counties—8.24 mi. grading, draining Highway No. 68, Camp-

bell & Co., Bowling Green, \$96,406; Marion County—2 steel and conc. deck girder bridges over Sequatchie River, Cole & Moore, Paducah, Ky., \$93,260; T. E. McEwen, State Highway Engr. 10-10

Tex., Amarillo—City, W. N. Durham, Manager, let contracts totaling \$95,596, for 42 blocks street paving and alley paving; To Zempter Construction Co., P. O. Box 497, Galveston, for street paving, Willmering & Mullen, 96 Polk St., for alley; L. M. Chokla, Street Paving Engr. 10-24

Tex., Calvert—Commrs. Court Robertson County, Franklin, let contract to S. Shambaugh, 1401 Dowling St., Houston, \$25,454, for 6-in. rein. conc. paving.

Tex., Dallas—Carl Pleasant, Inc., 229 N. Nogales St., Tulsa, Okla., has contract to pave Cole Ave., Lemmon Ave. to Knox St.

Tex., Houston—D. A. Jackson has contract for dirt work on 2 mi. road from Warren's ranch, southeast of Hockley, to mines of Houston Salt Co.; 60-ft. right of way, 30-ft. roadway, topped with Egyptian rock.

#### Sewer Construction

Sewer construction in LAND DEVELOPMENT projects involves the expenditure of large sums of money. Under that classification details of these improvements are reported.

Ala., Montgomery—McCalla & Keenan, Bell Bldg., reported, has contract for storm sewers on McKinley St. between Pennsylvania Ave. and Maryland St.

Ark., Hot Springs—South Hot Springs and Oaklawn Sewer & Water Dist., Garland County, reported, soon receive bids for sanitary sewers and water mains; H. S. Moreland, Engr., City Hall. 11-7

D. C., Washington—Following, reported, have sewer contracts: M. Cain Co., Inc., 13 Sixth St., N. W., for Parke Driveway storm water sewer, between D and F Sts., Capital View sanitary sewer in Ames St. between 53rd and 55th St., East Capital street between Division Ave. and 53rd St. and vicinity 55th and Clay Sts., N. E.; W. A. Pate, Jr., Rockville, Md., for Newton St. storm-water sewer between Eastern and Rhode Island Aves., N. E., Michigan Park storm water sewer vicinity 12th and Upshur Sts., N. E.; Joseph P. Maher, 3108 K St., N. W., for Eckington Place service sewer between Q and R Sts., N. E. 10-24

Fla., Jacksonville—City, M. B. Herlong, Chm. City Comm., reported, let contract to H. E. Halpin, Alken, S. C., for laying 3000 ft. of pipe sewer; Shearman Concrete Pipe Co., Baker Ave., contract for conc. pipe; Florida Machine & Foundry Co., 1561 W. Church St., for castings.

Fla., Plant City—City, J. C. Dickerson, Mgr., reported, construct disposal plant.

Ga., Atlanta—City, Clark Donaldson, Engr., soon call for bids for extension Stockdale sewer line from Confederate Ave. to city limits; cost \$55,000.

Ga., Bowden—City having plans completed by J. B. McCrary Co., Engrs., Citizens & Southern Bank Bldg., Atlanta, for \$25,000 sewer improvements; soon call for bids.

Ky., Louisville—Commrs. of Sewerage receive bids Nov. 19 for Raymond Ave. sewer. See Want Section—Bids Asked.

Ky., Winchester—City plans voting on \$180,000 sewer bond.

La., Houma—City receives bids Nov. 25 for sewers. See Want Section—Bids Asked.

La., Ringgold—City, L. B. Cook, plans storm sewers, curbs and gutters in Mill St.

Md., Cumberland—Kean & Corrigan, Inc., reported, have contract for extension of Dry Run conduit from Fairview Ave. to County farm, cost \$13,000; Elwood Schafer, for storm sewer in alley between Shriver and Shawnee Aves., from Franklin to Holland Sts. 10-31

Mo., Belton—City votes Nov. 19 on water and sewer bonds. See Financial News Columns.

Mo., Pacific—City defeated \$49,000 sewer bonds. 10-3

N. C., Greensboro—City, P. C. Painter, Mgr., reported, plans sewage disposal plant, South Buffalo Creek; cost \$300,000.

Okla., Asher—City plans \$40,000 sewers, disposal plant; Riggins & McMaster, Engrs., 603 1/2 W. Main St., Oklahoma City. 10-17

Okla., Gate—See Water Works.

Okla., Oklahoma City—L. Sanders, Tradesmen's Bldg., reported, has contract at \$60,000 for 18,500 ft. extension of 12 to 24-in. conc. sewers in 23rd, Kelly and Lincoln Park Sts.

Okla., Yukon—E. W. Baker & Co., Perrine Bldg., Oklahoma City, reported, has contract for sewage disposal plant.

Tex., Corsicana—City votes Nov. 26 on \$20,000 sewer extension and sanitary improvements.

Tex., Houston—Ricker Construction Co., Inc., Colorado St., reported, has contract for sanitary sewers on Vincent St. and on Dell Court; C. K. Horton, 2202 Clay St., for sanitary sewers on Cottage St.

Tex., Houston—City authorized bids for 2 Brooke Smith sanitary sewer projects; install sewage pump at Scott St. pumping plant; Hamp L. Shaw, Engr.

Tex., Junction—Municipal Engineering Co., Athletic Bldg., Dallas, reported, has contract for 5 mile sewers.

Tex., Sweetwater—See Water Works.

### Street Railways

Ga., Augusta—Augusta Ry. and Transportation Co. formed to acquire street railway properties of Georgia Power Co., by M. H. Hendee, 230 Green St., George H. Conklin, Bowdre Apt., and others.

### Telephone Systems

Md., Laurel—Universal Wireless Communication Co., Inc., Liberty Bank Bldg., Buffalo, N. Y., let contract within 10 days for wireless station here and negotiating for site at Norfolk, Va.; company projecting system over United States to transmit wireless message system from city to city; plan establishing stations in following cities in South: Charleston and Spartanburg, S. C.; Savannah and Atlanta, Ga.; Jacksonville, Tampa and Miami, Fla.; Winston-Salem, N. C.; Charleston, W. Va.; Louisville, Ky.; Jackson, Miss.; Knoxville, Nashville and Memphis, Tenn.; New Orleans, La.; Birmingham and Mobile, Ala.; Galveston, San Antonio, Austin and Dallas, Tex., and Oklahoma City, Okla.; first section of organization to be made commercially effective about January 1; majority to be of local controlled type; use leased space. (See Mobile, Ala., 11-7.)

Mo., Bakersville—Ozarks Central Telephone Co. establishing telephone system.

Mo., St. Louis—Southwestern Bell Telephone Co., E. D. Nims, Pres., reported, expend over \$50,000,000 in development in Southwest in 1930; large portion to be expended in underground conduits between Kansas City and St. Louis and south of Joplin, and Tulsa and Oklahoma City, Okla.

Tex., San Antonio—Southwestern Bell Telephone Co., B. D. Hull, Ch. Engr., Dallas, reported, starts work about Dec. 1 on \$2,500,000 administration building, Martin St. at Auditorium Plaza, as part of \$5,000,000 expansion program for city; ask bids in few days for excavating; 8 story, basement and sub-basement, first unit of 21-story building, brick, terra cotta, modified Spanish design; install power plant for telephone equipment, dial long distance and terminal equipment; I. R. Timlin, Archt., Telephone Bldg., St. Louis, Mo. 10-17

Tex., Dallas—Henger & Chambers Co., Gen. Contr., Dallas Natl. Bank Bldg., receiving sub-bids on \$1,000,000 telephone building of Southwestern Bell Telephone Co., B. D. Hull, Ch. Engr., Telephone Bldg.; I. R. Timlin, Archt., Telephone Bldg., St. Louis, Mo. 8-29

Va., Petersburg—Chamber of Commerce passed resolution to request Petersburg Telephone Co., H. C. Lightfoot, Gen. Mgr., to establish dial system in city.

W. Va., Fairmont—Chesapeake & Potomac Telephone Co., Charleston, started work on underground system to be extended from Eighth St. out Fairmount Ave. to new Watson bridge; \$17,000.

### Textile Mills

Ga., Griffin—W. H. Hightower, Jr., Thomaston, reported, expend \$400,000 for improvements to lately acquired plant of Griffin Mfg. Co.; install machinery, etc.

North Carolina—Allen-A Co., Kenosha and Sheboygan, Wis., reported, considering plans for erection of plants in Carolinas or Piedmont section; manufacturers of hosiery.

N. C., Belmont—Kitt Products Corp. organized; A. C. Lineberger, R. L. Stowe, A. F. Dichtenmueller, 2223 Dilworth Rd., W. Charlotte; reported, construct full fashioned hosiery mill. 10-31

N. C., Hickory—Longview Hosiery Mills, Inc., Wade H. Shuford, V. P., construct hosiery mill in Highland; 2 story; standard mill construction; 50x110 ft., with dye room; install sprinkler system, plumbing, heating, etc.; cost of building and equipment, \$150,000; Cline & Marlowe, Contrs., Hickory; Martin S. Hampton, Archt.

N. C., Spindale—Elmore Corp., K. S. Tanner, Pres., reported, acquired business of Elmore Co., and Southern Thread Mfg. Co., department of Southern Mercerizing Co., both Tryon; will remove equipment of Southern Thread Co., to Spindale, and install in Elmore Thread Co., department of Elmore Corp.; Elmore Corp., reported, organized Spindale Silk Co., handle pure silk and combination yarns. 8-22

S. C., Rock Hill—James T. Donovan, Inc., 28 Gordon Ave., Providence, R. I., plans establishing textile engraving plant at Rock Hill. 11-7

S. C., Spartanburg—Beaumont Mfg. Co., reported, have plans under way for addition of dyeing department; work probably begin in Jan. 9-12

S. C., Spartanburg—Spartan Mills, reported, install 25,000 long draft spindles; Saco-Lowell Shops, 147 Milk St., Boston, Mass., have contract.

Tenn., Kingsport—Fisher-Beck Hosiery Mills, Inc., capital \$100,000, chartered; Raymond Fisher, V. R. Beck; manufacture cotton and wool seamless hose.

Tenn., Trenton—Trenton Cotton Mills, W. A. Harder, Pres., Kinderhook, N. Y., reported, rebuild burned cotton mill.

Tex., Alvin—Chamber of Commerce, reported, negotiating with George H. Munzlinger, Houston, for hemp plant.

Tex., Dallas—Texas Textile Mills, Inc., chartered; W. C. Gowan, Magnolia Bldg.

### Water Works

Details of water works improvements in connection with the many LAND DEVELOPMENT operations will be found under that classification.

Ark., Russellville—Arkansas Power & Light Co., Pine Bluff, reported, construct 200,000 gal. standpipe and \$92,000 improvements to filtration plant.

Fla., Lake City—City Commr., reported, plan erecting 50,000 gal. water tank on 130 ft. tower.

Fla., Miami Beach—W. S. Lockman Constr. Co., 628 30th St., West Palm Beach, reported, low bidder for pumping station 51st St.

La., Thibodaux—Town votes Dec. 26 on issuance of \$195,000 bonds for water works improvements.

Ga., Augusta—Lombard Iron Works, 631 11th St., reported, has contract for 2 water pumps, capable of pumping 7,000,000 gal. daily; cost \$21,000.

Ky., Benton—Merkle Contracting Co., 413 City Bank Bldg., Kansas City, Mo., has contract at \$60,000 for water and sewers; vit. clay pipe and c. i. pipe, sewage disposal plant, deep well pump, elevated tank; machinery contracts not let. 10-31

La., West Monroe, Monroe—Chicago Bridge & Iron Works, 37 W. Van Buren St., Chicago, Ill., reported, has contract for 100,000 gal. steel tank for city.

Mo., Belton—See Sewer Construction.

Mo., Grant City—City, C. L. McLaughlin, Clk., reported, plans water works; J. W. Shikles & Co., Engrs., New York Life Bldg., Kansas City.

Okla., Britton—Koller Constr. Co., Tradesmens Bldg., Oklahoma City, reported, has contract for main extension.

Okla., Fletcher—Highway Constr. Co., First Natl. Bank Bldg., Tulsa, reported, has contract for water works.

Okla., Gate—City, reported, install water works and sewer system; Riggins & Mc-Masters, Engrs., 603½ W. Main St., Oklahoma City.

Okla., Leedey—Roebeck & Humphreys, Omaha, Neb., reported, has contract for steel tower, steel tank, Imhoff tank and sprinkling filter; cost \$55,000; Wood Engineering Co., Engrs., Perrine Bldg., Oklahoma City.

Okla., Purcell—City, reported, plans \$25,000 main extension.

Okla., Shattuck—City, reported, plans \$15,000 water main extension.

Tenn., Memphis—Bd. of Water Commrs., reported, voted to expend \$58,500 for pipe line extensions in Buntyn, extend line on Highland St. and Southern Ave.

Tenn., Memphis—City, reported, plans expend \$850,000 for sewer and \$60,000 for water extensions to Bluff City, newly annexed. 10-31

Tex., Abilene—City, reported, receives bids Nov. 15 for infiltration gallery to recover seepage water from Lake Abilene; cost \$30,000; Wynkoop & Klersted, Engrs., 614 Interstate Bldg., Kansas City, Mo.

Tex., Ballinger—City, W. C. McCarver, Mayor, has plans in progress by Hawley & Freese, Capps Bldg., Ft. Worth, for masonry dam on Elm Creek; cost \$75,000; Roy Davis, City Engr. 11-7

Tex., Clarksville—Layne-Texas Co., Second Natl. Bank Bldg., Houston, has contract for 500,000 gal. daily capacity water well and for equipment. 10-17

Tex., Coleman—City plans water works improvements, standpipe, filtration plant, etc.; F. W. Chappel, Engr., Coleman. 9-26

Tex., Fort Worth—Tarrant County Water Control & Improvement Dist., No. 1, acquiring land for dams and reservoirs; no date set for receiving bids; no further action likely until about Jan. 1; Hawley and Freese, Constl. Engrs., 411 Capps Bldg. 9-19

Tex., Levelland—City, reported, voted \$48,000 water works bonds.

Tex., Refugio—City, J. O. West, Mayor, votes soon on water works bonds; Hawley & Freese, Engrs., Frost Bldg., San Antonio. 10-24

Tex., Runge—Central Power & Light Co., Frost Natl. Bank Bldg., San Antonio, reported, extend water mains to outlying districts, replace present mains, etc.

Tex., Sweetwater—City, Sam Bothwell, Mayor, reported, let following contracts for filtration plant, etc., Hawley & Freese, 411 Capps Bldg., Fort Worth, and H. N. Roberts, Lubbock, Constl. Engrs.; Roebuck-Humphries Co., Omaha, Neb., at \$52,966 for disposal plant and sewer lines; Vedder Construction Co., Sweetwater, at \$44,000 for elevated storage tanks, using Pittsburgh Des Moines Steel Co.'s tanks; W. L. Supulver at \$4705 for town tower lines; Standard Paving Co., Majestic Bldg., Ft. Worth, and Tulsa, Okla., at \$34,000 for filter plant extension; Womack-Henning Co., Sherman, at \$345,866, for earth dam; all bids rejected on filter plant at dam and on pumping mach. 10-24

W. Va., Piedmont—See Miscellaneous Enterprises.

### Woodworking Plants

Ark., Clarksville—James L. Stice Handle Co., James L. Stice, Fayetteville, plans establishing handle plant.

Ky., Louisville—Louisville Parquetry Flooring Co., 2120 Woodland St., changing name to Plywood Products Co.

Miss., Waynesboro—F. P. Ellis, Robert Golden and F. M. Smith appointed as committee to cooperate with Chamber of Commerce in securing stave plant for Wayne County, to employ 50.

Mo., Kansas City—Hauber Cooperage Mfg. Corp., capital \$25,000, incorporated; Edward C. Hauber, 5434 Holmes St.

Tenn., Memphis—Nickey Bros., Inc., 2200 Summer St., hardwood manufacturer, purchased 10 automatic controllers from Standard Dry Kiln Co., Indianapolis, Ind.; 5 for Progressive and 5 for Softex kilns.

Tenn., Obion—Neely Mfg. Co., Collierville, manufacturer of general line of small dimension stock, arranged to remove plant and general headquarters here.

Tex., Big Spring—West Texas Lumber Co. acquired Clem Sash & Door Co.

Tex., Fort Worth—James M. and George Forsyth, McKinney, backing plan to establish plant to manufacture school desk chairs, to be in operation within 3 months.

### FIRE DAMAGE

Ark., Cove—Station of Kansas City Southern Rwy., A. N. Reece, Ch. Engr., Kansas City, Mo.

Ark., Cove—Three buildings of W. J. Barton and Dr. Hilton; three owned by W. J. Elliott, Mayor; one each owned by Mrs. Tom Scanlin; A. M. Woodell, Nat. Allen; J. A. Walker & Sons' general store; McDaniell Cafe; Wilson's Shoe Shop.



Ky., Bowling Green—Building owned by Robert Rodes, Pres., Citizens Natl. Bank, occupied by Woolworth Five and Ten Cent Store; buildings of Charles G. Davenport, Palace Confectionery and Turpin Bros.; loss \$20,000.

Ky., Louisville—Advance Battery Mfg. Co.'s plant, 227 E. Lee St.; loss \$20,000.

La., Arcola—Ernest Rodgers' residence.

La., Destrehan—Refinery of Mexican Petroleum Co. damaged.

La., Mount Hermon—Mount Hermon High School; loss \$12,000.

Md., Havre de Grace—Hotel Bayou; loss \$250,000.

Md., Harrisonville, R. D. from Owings Mills—Bungalow on estate of John K. Ruff, Liberty Rd., occupied by Leroy Beafman.

Miss., Lauderdale—Lyle Brown's store; loss \$30,000.

Miss., McHenry—P. E. Bond's warehouse.

Miss., Picayune—Jitney-Jungle and Picayune Dry Goods stores on Harvey Ave.

Mo., St. Louis—Lemay Theater, 318 Lemay Ferry Road, St. Louis County, owned by Mrs. I. M. Lau, 7820 Ivory Ave.; Macklind Theater, 5415 Arsenal St.; loss \$15,000.

Mo., St. Louis—Heinrichs Laboratories, Carl G. Heinrichs, Sec., 4110 Shenandoah Ave.; loss \$10,000.

N. C., Grover—Charlie and Ed. Ham-bright's double warehouse; loss \$10,000.

N. C., Hendersonville—Summer residence, Laurel Park, of R. L. Barnett, Florence, S. C.; loss \$10,000.

Tenn., Dandridge—Dwelling owned by J. H. Rimmer.

Tenn., Memphis—Britling Cafeteria, 155 Madison Ave., owned by Britling Cafeteria

Corp. of Tennessee, A. W. Johnson, Pres.; loss \$25,000.

Tenn., Trenton—Trenton Cotton Mills; loss \$500,000.

Tex., Amarillo—Thompson Drug Co., 101 Lincoln St.; loss \$10,000.

Tex., Barnum—Post Office. Address The Postmaster.

Tex., Brownwood—Norwood Dry Goods Co.'s store; Dixie Theatre; loss \$30,000.

Tex., Greenville—W. M. McBride Co.'s store, Martin McBride, Mgr.; loss \$50,000.

Tex., Fort Worth—Ice storage plant, Lancaster Yards, of Texas & Pacific Ry. Co., E. F. Mitchell, Ch. Engr., Dallas; loss \$125,000.

Tex., Houston—Abe Cwern's residence, 2519 Saltus St.

Tex., Lockhart—M. Rosenwasser's store.

Tex., Teague—Residences of J. R. Nicholas and M. O. Williamson; loss \$10,000.

Tex., Terrell—W. M. Frazier & Sons' warehouse; loss \$10,000.

Tex., Victoria—W. H. Crain's residence.

Tex., Waco—Waco Garment Mfg. Co.'s plant, M. L. Stroud, Mgr.; loss \$20,000.

Tex., Waco—R. E. Cox Dry Goods Co.'s store, owned by John Sleeper.

Va., Forestville—Orland E. Robbins' residence, owned by estate of Daniel Hull; loss \$7500.

Va., Luray—Washington Restaurant, owned by Mrs. Rosa Shandelson; loss \$10,000.

Va., North Garden—Lea Brothers & Bredley's store; Mrs. M. B. Price's residence; loss \$15,000.

W. Va., Bluefield—Carlton R. Calfee's residence and new building.

Miss., Carson—Methodist Church plans building.

Miss., Corinth—North Mississippi Annual Methodist Conference voted to erect \$100,000 church at University of Mississippi.

Miss., Jackson—First Presbyterian Church, Dr. J. B. Hutton, Pastor, plans bldg., N. State St. near Pinehurst St.

Miss., Tupelo—George Mitchell considers erecting \$25,000 brick veneer residence; 2 stories and basement, oak floors, tile baths, tile roof, steam heat.

Mo., Bakersfield—Baptist Church erect conc. and white pebble-dash stucco bldg.; Heckenlively & Mark, Archts., Landers Bldg., Springfield.

Mo., Poplar Bluff—Assembly of God Church, Rev. J. W. Eadel, Pastor, considers erecting brick building.

Mo., St. Louis—Evangelical Church of the Redeemer, Rev. H. Hellmuth, Pastor, 6452 S. Kingshighway, erect superstructure; brick, 1 story; P. J. Bradshaw, Archt., 718 Locust St.

Okla., Tulsa—Wheeling Ave. Christian Church, Maurice Magee, member, considers erecting \$60,000 bldg.; brick, stone and rein. conc., 2 stories; A. P. Wilks, Archt., Indianapolis, Ind.

S. C., Columbia—Shandon Baptist Church, C. E. Pettit, Chmn., receives bids Nov. 18 for semi-fireproof brick bldg.; struct. steel girder, wood joist, conc. footings, wood floors, slate roof; J. M. McMichael, Archt., 306 Park Ave., Charlotte, N. C.; following contractors estimating: Mechanics Contracting Co., Carolina Bk. Bldg.; J. T. Dabbs, 301 Saluda Ave.; W. A. Cray & Sons, 1226 Sumter St.; C. M. Lide, Hook Bldg.; J. C. Heslep, Carolina Bk. Bldg.; J. W. Rutherford, 3107 River Drive; Geo. W. Waring, 407 Shandon St., all Columbia, S. C.; J. J. McDevitt Co.; J. P. Little & Son, both Builders Bldg., Charlotte.

Tenn., Memphis—Buntyn-Normal Church of Christ organized; S. E. Castelman, member, Bd. of Elders, plans \$25,000 brick veneer building.

Tex., Waco—First Baptist Church, Rev. J. M. Dawson, Pastor, selected T. Brooks Pearson, 501 First State Bank Bldg., as architect for \$100,000 Sunday school. 10-31

## BUILDING NEWS

### BUILDINGS PROPOSED

#### Association and Fraternal

Ark., Hughes—Ancient Free and Accepted Masons, C. W. Martin, Chmn., Bldg. Comm., erect brick temple and community center bldg.; 2 stories, 35x70 ft., stone entrance, tile floors, comp. shingle roof; Hubert T. McGee, Archt., Fidelity Bk. Bldg., Memphis, Tenn.; preliminary plans.

Mo., Springfield—Ancient Free and Accepted Masons erect conc. bldg.; 2 stories, 20x70 ft.; store on first floor; Heckenlively & Mark, Archts., Landers Bldg., Springfield.

Tex., Cleburne—Ancient Free and Accepted Masons open bids Nov. 28 for brick and steel temple; \$60,000, 3 stories, 86x80 ft., wood, linoleum and cement floors, rein. conc. foundation, tar and gravel roof; address W. G. Clarkson & Co., Archts., First Natl. Bank Bldg., Fort Worth. 11-7

Tex., Sherman—Supreme Forest Woodmen Circle, Omaha, Neb., erect group of dwellings as next unit of \$500,000 national home for aged and orphans; \$25,000 structure authorized by Pennsylvania to be erected first; brick, 2 stories; contract let to Womack-Henning Construction Co., Sherman, for lake. 11-22-28

#### Bank and Office

Ga., Atlanta—R. E. Hightower, Jr., Thomaston, Ga., purchased 8-story and basement Thrower Bldg., Forsyth St.; reported to have survey made by Robert & Co., Inc., Engrs., Bona Allen Bldg., Atlanta, for possible changes.

Ky., Owensboro—First National Bank, Louisville, remodel First National Bank & Trust Co. Bldg., Third and Frederica Sts.; 40x91 ft., 2 vaults.

Miss., Natchez—Louis Fry erect 2-story addition to Fry Bldg., Pearl St.

Mo., Kansas City—Business Mens Assurance Co., W. T. Grant, Pres., Gates Bldg., purchased 10-story Sweeney Bldg.; will remodel.

Mo., Springfield—W. N. Thompson, Archt., 430 Loren St., drawing plans for brick office building.

Tenn., Dresden—Peoples Bank leased building; renovate.

Tex., Dallas—Martin Weiss, 1226 N. Bishop St., and others propose erection of 18-story office bldg. for use of attorneys; steel, 100x150 ft.; plans by DeWitt & Washburn, Archts., Kirby Bldg.

Tex., Dallas—Dallas Power & Light Co., Interurban Bldg., having plans drawn by Lang & Wittich, Archts., American Natl. Bk. Bldg., for \$1,250,000 office bldg., Browder & Jackson Sts.; brick, rein. conc., 18 stories and basement, 100x100 ft., conc. foundation. 10-24

#### Churches

Ala., Ozark—Methodist Church, J. E. Z. Riley, Chmn., Bldg. Comm., has low bid at \$22,990 from H. H. Brown, Dothan, for Sunday school; Warren, Knight & Davis, Archts., Protective Life Bldg., Birmingham. 10-24

Ark., Huffman—Roman Catholic Church erect building.

Ark., Monett—Methodist Episcopal Church, Rev. Alva A. Goode, Pastor, plans building.

Ark., Rogers—Interdenominational Union of Christian Workers, care Richard W. Woolsey, Evangelist, plans building.

D. C., Washington—Italian Baptist Church erect \$40,000 bldg., 505 L St., N. E.; brick, 2 stories; E. W. Syme, Archt., Insurance Bldg., 903 Fifteenth St., N. W.

Fla., Jacksonville—Epworth Methodist Church, Rev. L. W. Huggins, Pastor, has broken ground for bldg., 14th and Franklin Sts.

Ga., Atlanta—North Avenue Presbyterian Church, Dr. Richard Orme Flynn, Pastor, have plans ready by Nov. 20 for \$100,000 Sunday school; rein. conc., brick and tile, stone trim, 3 stories, conc., hardwood and tile floors, comp. roof; \$300,000 auditorium later; R. H. Hunt Co., Archt., James Bldg., Chattanooga, Tenn.; Robt. S. Fiske, Consult. Engr., Healey Bldg., Atlanta. 10-24

Md., Annapolis—Cyril H. Hebrank, Archt., Central Sav. Bk. Bldg., Baltimore, drawing plans for \$20,000 chapel; brick, 1 story.

#### City and County

Fla., St. Petersburg—City Comsn., E. H. Lewis, Director of Public Works, will call for bids after Nov. 18 for \$15,000 solarium, north mole; 75x150 ft.

Ky., Lexington—City, Jas. J. O'Brien, Mayor, advises that proposition of Security Trust Co. to erect \$400,000 auditorium and lease to city has been approved by number of civic clubs, individuals, etc.; also plans submitted by Frankel & Curtis, Archts., Wolfe-Wile Bldg., Lexington, approved; probably several months before legality of proposition is tested in court; Warner & Mitchell, Asso. Archts., Bulkley Bldg., Cleveland. 10-10

Ky., Murray—Calloway County defeated \$35,000 jail bonds. 4-18

Md., Baltimore—City, Wm. F. Broening, Mayor, plans to remodel bldg., Holliday St. near Lexington St., for museum.

Md., Gaithersburg—Gaithersburg-Washington Grove Volunteer Fire Dept., Dr. Wm. C. Barnett, Chmn., Bldg. Comm., break ground in few days for 1-story brick fire station; offices for mayor and city council.

Md., Hagerstown—Washington County Museum of Fine Arts; Hyde & Shepherd, Archts., 18 E. 48th St., New York, advise plans ready about 1 month; \$100,000, fireproof, brick, stone trim, 1 story, 50x80 ft. 8-22

Miss., Iuka—Tishomingo County defeated \$125,000 courthouse bonds. 10-24

Tex., Corsicana—City votes Nov. 26 on \$400,000 bonds, including \$25,000 for public market.

Tex., Junction—Kimble County opens bids Nov. 30 for brick and rein. conc. courthouse; \$100,000, 2 stories; Henry T. Phelps, Archt., Hicks Bldg.; W. E. Simpson Co., Engr., Milam Bldg., both San Antonio. 10-31

Va., Hampton—Hampton Roads Post No. 31, American Legion, interested in erection of municipal building.

Va., Herndon—Herndon Fire Dept. erect 2-story fire station; 35x42 ft.

Va., Lynchburg—City soon have plans ready for bids on fire station, Fifth and Church Sts.; \$50,000, brick; Clark & Crowe, Archts.

## Dwellings

Ala., Montevallo—Montevallo Cotton Mills erect 25 or 30 dwellings.

Ark., Blytheville—Joe Isaacs erect 1-story frame residence; pine floors, shingle roof.

D. C., Washington—C. W. Morris & Sons, Evans Bldg., have permit for \$11,000 dwelling, 4312 Thirty-seventh St., N. W.; brick, 2 stories.

D. C., Washington—L. B. Ellis erect residence, 5000 Meade St., N. E.; Lewis W. Giles, Archt., 1200 U St., N. W.

D. C., Washington—V. T. Richards erect residence, 4811 W St., N. W.; Jos. Baumer, Archt., 1212 Otis St., N. E.

D. C., Washington—H. R. Howenstein Co., 1311 H St., N. W., has permit for 3 frame dwellings, 4101-05 Twenty-first St., N. E.; 1 story, \$12,000.

D. C., Washington—Mitchell Quick, 1410 H St., N. W., has permit for \$10,000 residence, 3600 Patterson St., N. W.; brick, 2 stories.

D. C., Washington—Robt. Acorn, 719 15th St. N. W., has permit for \$14,000 residence and garage, 4555 Linnean Ave.; brick and tile, 2 stories.

D. C., Washington—Jos. M. Stanley, 3711 Northampton St., N. W., has permit for \$10,000 residence, 3229 Morrison St., N. W.; brick, 2 stories.

D. C., Washington—Mrs. Edwina B. Johnson has permit for \$10,000 residence, 2826 Thirty-ninth St. N. W.; brick, 1 story.

D. C., Washington—J. R. Tilley, 1304 F St. N. W., has permit for 4 brick dwellings, 410-16 Oneida Place N. W.; 2 stories; \$28,000.

D. C., Washington—St. Agnes' Church has permit for \$15,000 dwelling, 46 Q St. N. W.; brick, 3 stories.

Fla., Lakeland—H. Grady Zellner, 946 E. McDonald St., erect frame residence; 2 stories, 80x68 ft., Creole-Dipt shingle roof; Wilber F. Cornell, Archt., 727 Chiles St.; preliminary plans.

Fla., Miami Beach—John B. Reid & Co., Fifth St. and Meridian Ave., are agents for several persons planning residences.

Ga., Atlanta—Candler Dobbs, Jr., Hurt Bldg., erect \$65,000 residence, Valley Rd.; brick, 2 stories and basement, hardwood and tile floors, interior marble, slate or tile roof, steam heat; Hents, Adler & Shutze, Archts., Candler Bldg.; plans probably ready by Dec. 5.

La., New Orleans—Rev. D. H. Wattley, 7926 Freret St., ready for sub-bids about 1 week on Colonial residence; frame, 2 stories, 90x45 ft., tile and hardwood floors, slate roof, 2-car garage and laundry; Lockett & Chachere, Archts., Balter Bldg. 10-3

La., New Orleans—R. L. Ross receives bids until Nov. 15 at office Favrot & Livaudais, Ltd., Archts., for 2-story frame residence; hardwood floors, slate roof, built-in features; following contractors estimating: Reilly-Ruckstuhl, Inc., 423 Carondelet St.; C. N. Bott, Audubon Bldg.; Carl E. Woodward, Inc., Louisiana Bldg.; J. A. O'Brien, Louisiana Bldg.; Paul G. Charbonnet, 830 Union St.; L. Delarosa, 616 Poydras St. 11-7

La., New Orleans—M. Sazer, 2017 Chestnut St., erect 5 single dwellings and garages, Vincennes Place; asbestos and tile roof.

Md., Baltimore—W. W. Uphoff erect 5 frame dwellings, 2700 block Bayonne Ave.

Md., Baltimore—Gough W. Thompson, care S. McCreery & Co., First Natl. Bk. Bldg., erect \$30,000 residence; brick, 2½ stories.

Md., Baltimore—H. Findlay French, Munsey Bldg., erect 2½-story brick residence; Wyatt & Nolting, Archts., Keyser Bldg.

Md., Cumberland—Walter Capper, Green St., considers erecting \$20,000 residence, The Dingle; brick, 2 stories.

Md., Hagerstown—A. K. Coffman, E. Antietam St., plans \$70,000 residence, Potomac Ave.; stone, 2½ stories; C. E. Mountz, Archt., Young Bldg.

Md., Ruxton, Baltimore—Cyril H. Hebrank, Archt., Central Sav. Bk. Bldg., drawing plans for \$45,000 dwelling, Green Spring Valley; stone, 2½ stories.

Miss., Anguilla—J. M. Spain, Archt., Millsaps Bldg., Jackson, receiving bids for brick veneer dwelling; 2 stories, tile roof, oak floors, tile baths, sheet metal work.

Miss., Charleston—First M. E. Church, South, Rev. E. M. Lockhart, Pastor, rebuild burned parsonage.

Mo., Clayton, St. Louis—Robt. J. Ambruster, 7124 Forsyth St., erect \$30,000 residence, 6633 Clayton Rd.; brick, 2 stories, 60x80 ft., conc. foundation, slate roof, hot-water heat.

Mo., Kansas City—Howard Hall, 405 Gates Bldg., erect 3-story frame residence; Madorie & Bihr, Archts., Continental Bldg.

Mo., Kansas City—Leo F. Brady, Bldr., 300 E. 70th St., erect 8 dwellings, Oak St.

Mo., Webster Groves, St. Louis—W. A. Caldwell, Archt., 3719 Washington Ave., drawing plans for residence, Rockhill Rd.; 1 story and basement, about 40x40 ft., hardwood floors, tile bath, slate roof, vapor heat.

N. C., Aquone—Nantahala Power Co., J. E. Thorpe, Calderwood, Tenn., erecting construction camp below Aquone; erect 30 or 40 laborers' dwellings at Beecher; putting lumber on ground.

N. C., Charlotte—H. H. Baxter, 932 Ideal Way, erect \$18,000 residence, Queens Rd.; brick veneer, 12 rooms.

Okla., Oklahoma City—E. K. Gaylord, care Oklahoma Publishing Co., 500 N. Broadway, having final plans for \$100,000 residence drawn by G. A. Nichols, Inc., 115 N. Harvey St.; brick, 2 stories, oak floors, tile roof, steam heat; bids in December. 6-27

Tenn., Fountain Inn—V. M. Babb, Jr., erect brick veneer residence; E. N. Galt, Contr.

Tenn., Memphis—Dr. Henry Hill, 847 Marison Ave., erect stucco residence, Central Ave.; 2 stories, 100x37 ft., 3 tile baths, hardwood floors, tile roof; Geo. Mahan, Jr., Archt., Manhattan Bk. Bldg.; bids in.

Tenn., Nashville—C. F. Love erect \$10,000 residence, 1507 Seventeenth Ave., South; brick veneer, 10 rooms.

Tex., Dallas—Murphy-Bolanz Co., 1215 Commerce St., erect number brick veneer dwellings, Parkdale; several under constr.; T. B. Adkisson, Contr.

Tex., Harlingen—John T. Townsend erect \$20,000 residence; Italian type, tile and stucco, 2 stories; Stanley W. Bliss, Archt.

Tex., Houston—W. L. Edmundson, 2nd Natl. Bank Bldg., erect 5 dwellings, 2602-06 Oak Cliff, 5725 Dorbrant and 5726-27 Newport St.; brick veneer, 5 rooms; \$15,000.

Tex., La Porte—H. B. Harrison let contract to W. G. Streeter for post office; hollow tile and brick, 2 stories, 75x60 ft.; post office and store on first floor, offices above; Jerry Thiel, Archt., Esperson Bldg., Houston. 10-10

Tex., Seguin—Capt. A. Schlaffli, College and River Sts., erect frame shingle residence; 2 stories, about 27x36 ft., tile, wood, cement and linoleum floors, rein. conc. foundation; L. M. Wirtz, Archt., 1305 Blodgett Ave., Houston.

Tex., San Marcos—A. J. McKean remodel residence; frame, 2 stories; Herff & Jones, Archts., S. A. Loan & Tr. Bldg., San Antonio.

## Government and State

Ala., Anniston—Constructing Quartermaster, Lieut. O. E. Davis, reported, soon call for bids for 14 officers' quarters and 8 n. c. o. quaters; \$225,000.

Ala., Montgomery—State, Bibb Graves, Gov., having landscaping plans drawn by Olmsted Bros., Brookline, Mass., for improvements to capitol, educational institutions, etc.; after above are completed, Warren, Knight & Davis, Archts., Protective Life Bldg., Birmingham, will submit recommendations for building program.

Fla., Tampa—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., reported, rejected bids for extension and remodeling of post office; \$500,000. 10-31

Ga., Fort McPherson, Atlanta—Constructing Quartermaster, Fort McPherson, plans hospital.

La., Bogalusa—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., will probably not call for bids on post office before June, 1930. 12-20

S. C., Hartsville—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., opens bids Dec. 10 for post office; drawings from office Supvg. Archt.

Tenn., Columbia—Additional contractors estimating on post office remodeling and enlarging, bids Nov. 25 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.; Fayette Construction Co., 500 W. Short St., Lexington, Ky.; J. P. Foley & Sons, Inc., P. O. Bldg., Paris, Tenn.; M. & Q. Construction Co., Arcade, Nashville, Tenn.; A. M. Lundberg, Rwy. Exch. Bldg., St. Louis, Mo. 10-31

Va., Fortress Monroe—Government, reported, plans 24 company officers' quarters, Address Constructing Quartermaster, Fortress Monroe.

Va., Langley Field, Hampton—Government, reported, plans non-commissioned officers' quarters, Langley Field. Address Constructing Quartermaster.

## Hospitals, Sanitariums, Etc.

Ark., Little Rock—State Construction Comsn., Jos. M. Hill, Chmn., Fort Smith, selected Geo. R. Mann, Wanger & King, Donaghey Bldg., Little Rock, as architects for State Hospital for Nervous Diseases; Sullivan Jones, 25 W. 45th St., New York, Asso. Archt.; \$3,250,000 bonds authorized. 3-21

D. C., Washington—U. S. Veterans Bureau, care Constructing Quartermaster, Army Medical Center, rejected bids for neuropsychiatric ward, including utilities, Walter Reed General Hospital. 10-17

Fla., Lake City—Following contractors estimating on utilities storehouse and addition to mess and kitchen bldg., U. S. Veterans Hospital, bids Nov. 26 by U. S. Veterans Bureau, Arlington Bldg., Washington, D. C.; A. C. Samford, 301 Washington Ave.; Algernon Blair, First Natl. Bk. Bldg., both Montgomery, Ala.; Ward & Ward, Va. & Truslow Sts., Charleston, W. Va.; Batson-Cook Co., Inc., West Point, Ga.; Johnson Finance & Construction Co., Atlanta Natl. Bk. Bldg.; J. M. Raymond Construction Co., Hildebrandt Bldg., both Jacksonville, Fla.; Grahm Construction Co., Red Rock Bldg., Atlanta, Ga.; King Lumber Co., Charlottesville, Va.; David Lupton's Sons Co., Allegheny Ave. and Tulip St., Philadelphia, Pa.; H. B. Trauger Construction Co., 2609 Cleveland Blvd.; Wm. W. Durnall, Inc., 213 S. Tennessee Ave., both Lakeland; D. F. Brandon, James Bldg., Chattanooga, Tenn.; A. DeFranceschi, 518 Malcolm St., Memphis, Tenn.; W. P. Rose & Co., Goldsboro, N. C.; Continental Contracting Co., Inc., Fort Dodge, Iowa; Claussen-Lawrence Construction Co., 1304 Gwinnett St., Augusta, Ga.; Warner Elevator Manufacturing Co., Cincinnati, O.; Crane Co. (plumbing), Washington. 11-7

Ga., Atlanta—City Council, Robt. F. Pennington, Mayor Pro Tem, adopted resolution to call election Feb. 5 on \$3,000,000 bonds; \$2,000,000 to be for Henry Grady Hospital and \$1,000,000 for Battle Hill Sanitarium. 9-19

Md., Catonsville, Baltimore—Following contractors estimating on \$400,000 stone ward bldg. for Spring Grove State Hospital for Insane, bids Nov. 21 by Dr. Robt. E. Garrett, Supt.; Henry L. Maas & Son, 1119 Ensor St.; Price Construction Co., Maryland Tr. Bldg.; M. A. Long Co., 10 W. Chase St.; David M. Andrew Co., Sisson and 26th Sts.; P. C. Street Engineering Co., 404 St. Paul St.; Cogswell-Koether Co., 406 Park Ave.; Davis Construction Co., 9 W. Chase St.; North-Eastern Construction Co., 6 W. Madison St.; Chas. L. Stockhausen Co., Inc., Marine Bank Bldg.; E. G. Turner, 2133 Maryland Ave.; Thos. Hicks & Son, Inc., 106 W. Madison St.; Henry Powell Hopkins and Allen T. Burton, Archts., 347 N. Charles St.; James Posey, Mech. Engr., 201 W. Franklin St., all Baltimore. 11-7

Md., Cumberland—Allegheny Hospital, Sister Mary Fidells, plans 3-story brick addition to bldg., 215 Decatur St.

Miss., Rosedale—A. F. Goza is chairman of group interested in erection of hospital.

N. C., New Bern—Duke Foundation, Dr. W. S. Rankin, 15 Briarwood Rd., Charlotte, may give sum toward erection of \$100,000 hospital for negroes.

S. C., Sumter—Tuomey Hospital, I. C. Strauss, Pres., receives bids Nov. 26 for fireproof hospital; \$100,000, rein. conc., face brick, gypsum tile, hollow tile, struc. steel, 4 stories, 43x148 ft., marble, tile and terrazzo floors, conc. foundation, Barrett or Johnson-Manville 20-yr. built-up roof; Wilson & Tatum, Archts., Palmetto Bldg., Columbia; following contractors estimating: J. A. Gardner, 211½ N. Tryon St.; J. J. McDevitt Co., Builders Bldg., both Charlotte, N. C.; Southern Builders, Inc., Florence, S. C.; W. A. Underwood Co., Inc., Wilmington, N. C.; Fiske-Carter Construction Co., 121½ W. Main St., Spartanburg, S. C.; Jewell-Riddle Co., Sanford, N. C.; North-Eastern Construction Co., Nissen Bldg., Winston-Salem, N. C.; Angle-Blackford Co., Amer. Bk. Bldg., Greensboro, N. C.; W. A. Cray & Son, 1226 Sumter St.; Mechanics Contracting Co., J. C. Hestep, both Carolina Bk. Bldg.; Southeastern Construction Co., all Columbia. 10-3

Tex., Rusk—State Bd. of Control, R. B. Walthall, Chmn., Austin, open bids about



Nov. 20 for kitchen and refrigerator room and addition to tubercular cottage, State Hospital for Insane; former L shape, brick, tile and rein. conc., 40x60 ft. and 24x18 ft., terrazzo floors, enamel brick, \$23,000; latter 1 story, brick and rein. conc., \$20,000; Page Bros., Archts., Austin Natl. Bank Bldg., Austin; Gardner & Howe, Engrs., Kirby Bldg., Dallas.

Tex., San Antonio—Woodmen of the World, Brady Bldg., W. A. Fraser, Pres., improve and erect addition to W. O. W. Memorial Hospital.

### Hotels and Apartments

D. C., Washington—H. C. Ball, 1103 Vermont Ave., N. W., soon ready for bids for \$100,000, 5-story, brick, 35-apartment, Third and T Sts.; G. T. Santmyers, Archt., 1418 Eye St., N. W.

Fla., Miami Beach—J. Gescheidt, Inc., Penn Hotel Bldg., plans erecting \$400,000, 10-story co-operative apartment, about March 1930, on 27th St., between Collins Ave. and Indiana Creek; B. Kingston Hall, Archt., 125 Sixth St.

Fla., Miami Beach—Hotel Monterey, West Ave. and 9th St., erect addition; B. Kingston Hall, Archt., 125 Sixth St.

La., Monroe—H. K. Touchstone, 1001 S. Grand St., erect \$35,000, brick, 12-apartment; tile and comp. roof, built-in features; J. W. Smith & Associates, Archts., Ouchita Natl. Bk. Bldg.; bids in. 10 24

La., Shreveport—J. F. Annan, Archt., Slatery Bldg., Shreveport, ready for bids about Nov. 20 for completion brick apartment, Creswell St. and Robinson Place, for Constitution Indemnity Co., Philadelphia, Pa.; work to cost \$90,000; 210x138 ft., 30 suites.

Md., Baltimore—Investment Construction Co., Inc., applied for permit for 11-story, 93x180 ft., fireproof 80-apartment in rear of Carolina Apartment, 108-14 West University Parkway; \$1,000,000 including site; garage 25x200 ft.; plans by Louis T. Rouleau, both Investment Bldg., Washington, D. C. and Wm. Ganter and associates, Knickerbocker Bldg., Baltimore.

Md., Baltimore—J. A. Gallagher, 3904 Canterbury Rd., reported, erect \$1,000,000, 8-story, brick, limestone trim, Colonial type, 125-apartment building, 2519 N. Charles St.; 1 room and bath to 6 rooms, garage; probably soon call for bids.

Md., Montgomery County—Brainard H. Warner, Jr., Tower Bldg., Washington, D. C., reported, erect 15-story, 2,000-room apartment on land fronting proposed Rock Creek Park; basement storage space for 500 automobiles; swimming pool, gymnasium and shops; also private golf course and airplane landing field; construction scheduled for spring.

Miss., Biloxi—Col. J. W. Apperson remodel and refinish Hotel Riviera.

Miss., Durant—Billy Wade Moore remodel Hotel Blanche; store part to be lengthened to rear, making department store interior, stairway in center of lobby to be turned around, provide lobby up stairs and dining room.

Mo., Joplin—Allis Hotel Co., Barney L. Allis, Pres., expend \$10,000 for additional ventilating equipment and remodeling Main St. front.

Mo., St. Louis—Mrs. P. J. Moynihan, 3951 Evans Ave., erect 2-story, brick, 4-apartment, 3950 Evans Ave.; J. E. Tarling, Archt., 2806 N. Grand Ave.

N. C., Charlotte—R. H. McMillan has permit for \$35,000, 3-story, 48-room, brick veneer and stucco apartment, 1125 Dilworth Road.

Okla., Miami—Pierce Petroleum Corp., E. D. Levy, Pres., Pierce Bldg., St. Louis, Mo., having plans prepared by Hoener, Baum & Froese, 3605 Laclede Ave., St. Louis, for 2 or 3-story, 40x50 ft., brick, 40-room tourist hotels at Miami, Tulsa and Oklahoma City; slate roofs, steam heat. 2-28

Okla., Oklahoma City—See Okla., Miami.

Tenn., Memphis—Lynn Welcher & Co. erect \$50,000, 1-story, 156x60-ft. frame dance hall at Fair Grounds Park; Harry Baker & Co., Archts.-Engrs., Grand Central Terminal Bldg., New York. 10-24

Tex., El Paso—Angelus Hotel Co., L. M. Crawford, Pres., expend \$15,000 for improvements to Crawford Hotel.

Tex., Weimar—Henry Brasher plans hotel on site old Jackson Hotel.

### Miscellaneous

Fla., Ocala—Penn-Fla Development Co., 2014 Noble St., Swissvale Station, Pittsburgh, Pa., erect clubhouse addition.

La., New Orleans—F. Laudumley & Co., Ltd., erect 2-story, 104x200-ft., rein. conc., brick, fireproof funeral home and garage, 112 N. Rampart St.; hardwood floors; Theard & Matthews, Archts., Balter Bldg.

La., Provencal—C. C. Stahls rebuild restaurant destroyed by fire.

Tex., Corpus Christi—Corpus Christi Yacht Club, Rae E. Eastley, Sec., erect clubhouse.

Tex., Edinburg—Retant Development Co., A. Y. Baker, Pres., erect \$50,000 clubhouse.

Tex., El Paso—El Paso Country Club, J. C. Wilmarth, Pres., screen porches, install plumbing system, provide grass greens; \$10,000.

Tex., Mission—Marvin Goodwin having plans prepared by A. H. Woolridge, McAllen, for \$25,000 clubhouse.

Tex., San Antonio—Cavalier Saddles, Inc., care Marvin Eickenroht & Bartlett Coker, Archts., Maverick Bldg., has low bid at \$31,877 from Von Rosenberg & Key, 1515 N. Alamo St., for 1-story rein. conc., hollow tile and stucco club building, San Pedro St. and Basse Road; cast stone trim, tile roof, Spanish type.

Tex., Weslaco—Lakewood Development Co. having plans prepared by R. Newell Waters for \$20,000 clubhouse; 2 stories, tile and stucco.

### Railway Stations, Sheds, Etc.

Tex., Livingston—Southern Pacific Lines, R. W. Barnes, Ch. Engr., Houston, erect conc. and stucco depot.

### Schools

Ark., Charleston—School Bd. has low bid at \$25,392 from Walter Vernon, Fort Smith, for 1-story and basement, brick, 6-classroom high school; Bassham & Wheeler, Archts., both Kennedy Bldg. 10-17

D. C., Washington—District Comms., 509 District Bldg., receive bids Nov. 20 for 4-room addition and improvements to Buchanan School; plans at Room 427, District Bldg.

Ga., Augusta—Richmond County voted \$1,000,000 school building bonds; Lawton B. Evans, Supt. of Education. 9-26

Fla., Bartow—Bartow School Dist. votes Nov. 15 on \$25,000 bonds for school; Polk County Bd. of Public Instruction.

Ga., Atlanta—Alexander-Seawald Co., 414 W. Peachtree St., N. E., has low bid from Griffin Construction, 452 Spring St., N. W., for \$40,000, 1-story and basement, 119x129 ft., brick store on Hunnicutt St.; tile floors, Indiana limestone trim, built-up roof; Robert & Co., Engrs., Bona Allen Bldg. 11-7

Ga., Atlanta—Epsilon Chapter of Kappa Alpha Fraternity, Emory University, has low bid from Christian & Bell, Mortgage Guarantee Bldg., for \$25,000, 2-story and basement, brick veneer fraternity house; slate roof, stone trim, hardwood and tile floors, steam heat; Hentz, Adler & Shutze, Archts., Candler Bldg. 10-24

Ga., Atlanta—Fulton County Bd. of Education, Jere Wells, Supt., erect \$65,000, 2-story, brick grammar school at Grove Park; comp. roof, hardwood and tile floors; Daniell & Beutell, Archts., Healey Bldg.; also erect \$105,000, 3-story, rein. conc., brick, steel, 21-classroom and auditorium high school on North Side; Hentz, Adler & Shutze, Archts., Candler Bldg.

Ky., Louisville—City, reported, voted \$3,000,000 school building bonds. 9-19

Ky., Owensboro—Davless County Bd. of Education erect school on Livermore Road, another at Maceo and third either at Sorgho or Stanley.

La., Alexandria—Weiss, Dreyfous & Seiferth, Archts., Maison Blanche Bldg., New Orleans, receive bids Nov. 30 (extended date) for \$50,000, 1-story, rein. conc., brick, stone trim dormitory for State Colony and Training School near Camp Beauregard; slate roof, conc., terrazzo and maple floors; dormitory to have 6-room camelback to contain operating rooms. 11-7

La., Columbia—Caldwell Parish School Bd., E. Cottingham, Sec., receives bids Nov. 30 for high school in Ward of Caldwell Parish; bids for turn-key job and for work alone; \$18,000 bonds will be issued.

Md., Baltimore—Bd. of Public Improvement Comsn., H. J. Leimbach, Supvr. Engr., selected Flournoy & Flournoy, 206 St. Paul St., to prepare plans for \$200,000 addition to School No. 122, Preston St. near Druid Hill Ave.; also erect school at Monroe and Hollins Sts.

Md., Baltimore—Girls Latin School, Miss Nellie M. Wilmot, 10 Club Road, erect 1-story brick gymnasium; E. H. Glidden, Archt., American Bldg., soon take bids.

Md., Baltimore—Public Improvement Commission, H. J. Leimbach, Supvr. Engr., erect elementary school on site bounded by Mosher St., Wheeler, Riggs and Warwick Aves.

Md., Cumberland—L. Bernstein, 9 N. Centre St., plans \$50,000, 3-story, brick addition to department store.

Md., Salisbury—Wicomico County Bd. of Education, James H. Bennett, Supt., may receive bids soon for \$300,000, 3-story, 256x148-ft., fireproof, brick and stone high school; 33 classrooms, auditorium, gymnasium, library, cafeteria, manual training, home economics, locker rooms and showers; Smith & May, Archts., Calvert Bldg., Baltimore; plans not complete.

Miss., Bay St. Louis—St. Joseph Academy soon ready for bids for 2-story, 90x110 ft., brick gymnasium, auditorium, classroom and music room addition; E. F. Spori, Vincent Bldg., New Orleans. 9-15

Miss., Drew—Bd. of School Trustees having plans prepared by J. M. Spain, Millsaps Bldg., Jackson, for 2-story, 142x120 ft., hollow tile and stucco high school; tile and comp. roof.

Miss., Heidelberg—Heidelberg Special Consolidated School Dist. voted \$50,000 bonds for brick high school. 10-24

Miss., Summitt—Bd. of Education having plans prepared by J. Howard Ryan, McComb, for 1-story and basement, 4-classroom brick addition to grade school. 10-24

Mo., Kansas City—St. John's Catholic Seminary, Rt. Rev. James J. McCaffrey, 416 W. 12th St., having plans prepared by O'Meara & Hills, Arcade Bldg., St. Louis, for \$400,000, brick, stone and rein. conc. building. 10-10

Mo., Macon—Bd. of Education, C. Wardell, erect \$85,000, 2-story, brick high school; R. W. Roberts, Archt., 719½ Webb St., Chillicothe; bids in. 8-1

Mo., Overland, St. Louis—Principia College, T. E. Blackwell, Bus. Mgr., 5455 Page Blvd., St. Louis, having sketches prepared by Maybeck, Howard & White, 163 Sutter St., San Francisco, Cal., for group of college buildings, Lackland Road and Creve Coeur car tracks; rein. conc., brick, stone; \$2,500,000.

Mo., Springfield—Bd. of Education, A. R. Stewart, Sec., erect \$100,000, 2 and 3-story Lincoln Grade and Jr. High School; \$96,000, 2-story New Weaver Grade School, Heckenlively & Mark, Archts., Landers Bldg.; remodel and erect addition to Senior High School, 400 block E. Central St.; \$91,000, 3 stories; also erect \$50,000 New Home Grade School; G. F. Reed, Archt., Woodruff Bldg., Springfield; Wm. B. Ittner, Asso. Archt., 911 Locust St., St. Louis. 8-8

Mo., St. Joseph—Bd. of Education, A. L. Loving, Sec., ready for bids about Feb. for Webster Grade School; brick, tile roof, conc. floors; E. R. Maier, Archt., Lincoln Bldg.; Wm. B. Ittner, Asso. Archt., 911 Locust St., St. Louis. 8-8

Mo., St. Louis—Washington University, Geo. R. Throop, Chancellor, and W. McKim Marriott, Dean of School of Medicine, let contract to Gamble Construction Co., 622 Chestnut St., for foundation for \$400,000 Radiology Institute, Scott and Euclid Aves.; ready for bids for superstructure about Nov. 13; 9 stories and basement, 95x72 ft., brick, rein. conc., fireproof; Jamieson & Spearl, Archts., Arcade Bldg. 8-22

Mo., St. Louis—Holy Cross Catholic Church, Rev. Anton Wigger, Pastor, 8115 Church Road, erect 2-story and basement, 56x78 ft., brick and rein. conc., fireproof school; 8 classrooms, recreation rooms and sodality rooms; 2-story garage, 20x30 ft. attached; slate roof, stone trim, steam heat; Jackson & Peck, Archts., Buder Bldg.

N. C., Durham—North Carolina College for Negroes, R. L. Flowers, Chmn., erect dining hall; Atwood & Nash, Inc., Archt.-Engr., Chapel Hill; bids in. 8-1

N. C., Lexington—Davidson County Bd. of Education erect 2-room addition to school at Reeds; 4-room addition to school at Pilot; 2 rooms to school at Midway and auditorium addition at Wallburg; bids in.

Okla., Stroud—Bd. of Education, Clark Curry, Pres., erect \$10,000 gymnasium; A. J. Love & Co., Archts., Atco Building and Loan Bldg., Tulsa.

S. C., Greenville—Bd. of Education, E. M. Blythe, Chmn., Bldg. Comm., selected J. E. Sirrine & Co., Main St., to prepare plans for addition to high school; rein. conc., stone trim, built-up roof. 10-31

S. C., Tamassee—Daughters of American Revolution School erect \$30,000, 2-story, brick and native stone building; refrigeration plant and storage rooms in basement; dining room to accommodate 175 students on first floor; second floor for sleeping quarters.

S. C., Tigerville—North Greenville Baptist Academy, J. T. Bowden, Chmn., Bldg. Comm., erect administration building.

Tenn., Maryville—Maryville College having plans prepared for 1-story stone Y. M. C. A. building.

Tenn., Memphis—Bd. of Education, W. J. Prescott, Pres., erect 6-classroom addition to A. B. Hill grammar school. 7-25

Tex., Alice—Alice Ind. School Dist. Trustees, Mrs. Ora Lea Reed, Pres., have low bid at \$94,805 from George H. Belote, Box 1068, Corpus Christi, for 2-story, 168x156 ft., 9-classroom and auditorium high school and 1-story home economics building; brick, struc. steel and rein. conc., cast stone trim, comp., cement, wood, tile and linoleum floors; Gleescke & Harris, Archts., Norwood Bldg., Austin. 10-10

Tex., Corsicana—City votes Nov. 26 on \$275,000 school bonds.

Tex., Dodsonville—Collingsworth County Bd. of Education, J. D. Wilson, Supt., Wellington, erect 4-room brick annex to school.

Tex., League City—Galveston County Bd. of Education, O. E. Kennedy, Supt., Galveston, consolidate League City Ind. School Dist. with Friendswood and Kemah and erect \$75,000 high school, probably at League City.

Tex., Lubbock—Bd. of Education, A. C. Jackson, Sec., ready for bids about Nov. 20 for \$650,000, 2 and 3-story, brick, tile and rein. conc., stone trim Senior High School; conc., tile, terrazzo and wood floors; Peters, Strange & Bradshaw, Archts., Myrick Bldg. 8-8

Tex., San Antonio—Bd. of Education, J. G. Hornberger, Pres., soon call for bids for heating plants for elementary schools No. 5, Tarian Place, No. 2, Marshall St.; No. 10, S. St. Mary's St.; No. 16, Brooklyn Ave. and No. 17, Van Ness and Calhoun Sts.

Tex., Texarkana—Texarkana Ind. School Dist. Trustees receive bids Dec. 15 for \$140,000 Sr. High School, repairs to old high school for junior high, 3-room addition to Akin School, 8-room addition to Dunbar High School, 6-room building for Newton school and 2-room addition at Sunset School; \$235,000 bonds available; Witt, Seibert & Halsey, Archts. 10-24

Va., Richmond—University of Richmond, Dr. F. W. Boatwright, Pres., soon call for bids for Roger Milhiser Memorial Gymnasium, gift of Regina G. Milhiser; swimming pool 35x75 ft., boxing and mat rooms, dressing rooms; Chas. M. Robinson, Inc., Archt., Times-Dispatch Bldg.

W. Va., Benwood—Union School Dist., Marshall County, voted \$140,000 bonds for addition and gymnasium at Union High School at Benwood, and for grammar schools at McMechen and Sherrard; A. F. Dayton, Archt., 1506 Market St., Wheeling. 10-3

W. Va., Charleston—Loudon School Dist. votes Dec. 10 on \$450,000 bonds for following schools: High school at South Charleston, \$250,000; junior high school at Marmet, \$100,000; grade school between South Malden and Kanawha City, \$50,000; grade school at Chesapeake, \$20,000; grade school at Vandalia, \$20,000; equipment for proposed buildings, \$10,000; R. H. Dunn, Member Bd. of Education. 9-26

W. Va., Huntington—State Bd. of Control, Jas. S. Lakin, Pres., Charleston, has low bid at \$189,440 from R. Mankin & Co., 914½ 6th Ave., Huntington, for 3-story and basement, 72x150 ft., brick and stone, fireproof library at Marshall College; Indiana limestone trim, steam heat; Meanor & Handloser, Archts., 1139 Fourth Ave., Huntington. 9-26

W. Va., Romney—Romney, Springfield, Gore, Sherman and Mill Creek School Dist.

vote Dec. 13 on \$150,000 bonds for high school; E. W. Noland, Supt., Hampshire County Bd. of Education, Romney. 9-26

### Stores

Ala., Huntsville—Sterchi Bros. Stores, Inc., J. G. Sterchi, Pres., Knoxville, Tenn., advises will not erect 5-story building. 11-7

Ark., Harrison—T. E. Milburn erect two 25x150 ft., brick stores.

D. C., Washington—D. J. Kaufman, Union Trust Bldg., has permit for \$29,820, 2-story, brick store, 333 Fourteenth St., N. W.

D. C., Washington—Mrs. J. B. Harriman, 1733 N. Capitol St., has permit for 3-story brick addition and improvements to building, Reservoir and Ridge Roads, N. W.; \$12,000.

Fla., Miami—L. M. Raffell, Waterbury, Conn., has low bid at \$19,800 from F. D. Bartlett for 1-story, 100x80 ft., rein. conc., struc. steel, conc. block, stucco, cast stone trim store, 1300 block W. Flagler St.; Carlos B. Schoeppl, Archt., Florida Theatre Bldg., Jacksonville. 11-7

Fla., West Palm Beach—Dr. J. A. McIntosh, Comeau Bldg., let contract at \$10,482 to C. G. Warner Co., 710 Upland Rd., for 2-story, rein. conc. and conc. block, stucco store, 42nd St. and Broadway; Carlos B. Schoeppl, Archt., Florida Theatre Bldg., Jacksonville.

Ga., Atlanta—J. Leachin Co., Eagan Estate, care Marion M. Jackson, Citizens & Southern Bldg., receives bids Nov. 18 for 2-story and basement, 95x35-ft., rein. conc., brick, terra cotta or Indiana limestone trim store, 77 Whitehall St., S. W.; rubber tile floors, tar and gravel roof, sprinkler system; Morgan, Dillon & Lewis, Archts., Grant Bldg.; following contractors estimating: George A. Clayton Co.; Gilbert Beers, both Bona Allen Bldg.; The Flagler Co., Red Rock Bldg.; Brazell & Miller, Norris Bldg.; Capitol Construction Co., McGlawn-Bowen Bldg.; Joe Walker, Georgia Savings Bk. Bldg., all Atlanta.

Ky., Lexington—John F. Nunan, 245 Stone Ave., remodel 2-story buildings, 123-25 E. Main St., to be occupied by R. S. Thorpe & Sons, men's clothing store; \$10,000; Churchill & Gillig, Archts., Fayette Bank Bldg.

La., Alexandria—Hill, Harris & Co. receives bids Nov. 26 (extended date) for first unit of 2-story warehouse, office and store; 12,000 sq. ft. floor space; brick and steel, conc. and cellized oak floors, comp. roof; E. Leo Ball, Archt., Haas Bldg. 10-24

La., New Orleans—O. P. Mohr, Archt., Canal Bank Bldg., preparing plans for \$40,000 to \$50,000 building.

La., Provencal—R. H. Osborne rebuild store and residence destroyed by fire.

La., Shreveport—T. J. Bryson, 1018 Jacobs St., soon ready for bids for 1-story brick commercial building, 1012 Texas Ave.

Md., Baltimore—Peoples' Service Drug Stores, 77 P St., N. E., Washington, D. C., leased 2-story building at 322 Greenmount Ave. and rebuild into 1-story structure.

Mo., Joplin—Myers Tri-State Supply Co., W. D. Myers, Pres., Fifth and Wall Sts., erect addition and remodel store; \$20,000, 2 stories, brick; Smith & Van Pelt, Archts., Joplin Natl. Bk. Bldg.

Mo., St. Louis—McKelvey-Carter & Co., 3800 W. Pine St., erect 8-story store and apartment, 5096-5100 Delmar Blvd., containing three 2-family flats and 6 stores on ground floor.

Mo., St. Louis—St. Louis Asphalt Co., 2626-30 Chateau Ave., soon let contract for addition and alterations to building; Wm. J. Beattie, Archt., Frisco Bldg.

N. C., Asheville—J. R. Clements, 320 Montford Ave., selected Douglas D. Ellington, Flat Iron Bldg., to prepare plans for alterations and additions to store, 47 Patton

Ave.; 3 stories, rein. conc., brick, comp. roof, store fronts.

Tenn., Chattanooga—Lerner Brothers, 215 W. 40th St., New York, leased 3-story building on Market St. and expend \$15,000 for improvements for store; install fixtures to cost \$50,000.

Tenn., Knoxville—C. Neil Bass, of Bass & Clayton, Independent Bldg., and M. D. Arnold, 307 Joiner Ave., both Nashville, plan group of brick stores and public garage on Church St.

Tex., Bellville—Dr. J. A. Neely erect 2-story clinic and store; hollow tile and brick, stone trim; L. A. Glover and Carl A. Mulvey, Archts., San Jacinto Trust Bldg., Houston.

Tex., El Paso—Angel Ramirez has permit for 2-story store and apartment, 1001-03 Stanton St.

Tex., Gonzales—C. E. Dillworth erect 1-story, 62x125 ft., hollow tile and brick store to be leased to Montgomery Ward & Co., Chicago; Page Brothers, Archts., Austin National Bank Bldg., Austin.

Tex., Houston—Harry and Jack Freedman, Bankers Mtg. Bldg., soon start work on \$25,000, rein. conc. and brick, 5-store, Harrisburg Blvd. and Hagerman St.; 100-ft. frontage.

Tex., La Porte—P. Nicolette, Beaumont, erect 2-story, brick store and apartment.

W. Va., Nutter Fort—Cornelius Aizpuri, of Sutter Roofing & Cornice Co., erect building to replace burned structure; brick and tile, fireproof.

W. Va., Nutter Fort—Bert Brown, of Appaline Oil Co., erect building to replace structure destroyed by fire.

### Theaters

Ark., Fort Smith—Malco Amusement Company States Theaters, Inc., M. A. Lightman, Pres., Memphis, leased theater at 808 Garrison Ave. and expend \$15,000 for improvements.

Tex., Lufkin—Lee Threet remodel Texan Theatre; extend 25 ft. to rear, elevate ceiling.

### Warehouses

La., New Orleans—Louisiana and Arkansas Rwy. Co., E. F. Salisbury, Ch. Engr., Minden, erect 2-story, 100x250 ft., brick and frame warehouse, Julla and LaSalle St.; Emile Weil, Inc., Archt., Whitney Bk. Bldg.; bids in.

Md., Baltimore—Loose-Wiles Biscuit Co., 1407 Fleet St., erect 1-story brick warehouse, 25th St., west of Kirk St.; \$30,000, including site; 8000 sq. ft. floor space.

Miss., Meridian—National Biscuit Co., 300 26th St., erect \$15,000, 1-story and basement, brick building on 22nd Ave. near M. & O. freight depot; Frank Fort, Archt., Meridian.

Tenn., Columbia—Lex Watson erect fireproof warehouse on Cemetery Ave.

Tex., Amarillo—Minneapolis-Moline Implement Co., H. S. Holm, Asst. Treas., 2854 Minnehaha St., Minneapolis, Minn., plans branch house.

Tex., Laredo—Roberto Zungia & Co. have permit for \$10,000, brick warehouse end of Iturbide St.

Tex., Sweetwater—International Harvester Co. of America, Chicago, B. N. Roberts, Local Branch Mgr., T. O. Cowan Bldg. (temporary address), start work about Jan. on 100x640 ft. building; one section, 100x100 ft., will be 2-story brick office and show room; remaining section, 100x540 ft., for metal warehouse to be used as assembling plant; 74,000 sq. ft. floor space; W. D. Price, Architect for company.

W. Va., Clarksburg—Maurice B. Caplan, Park Heights and Kate Aves., Baltimore, Md., erect \$10,000 galvanized warehouse; Horner Brothers, Engrs., Clarksburg.

## BUILDING CONTRACTS AWARDED

### Bank and Office

Ala., Pratt City—Pratt City Savings Bank erecting brick and marble bldg., Third St. and First Ave.

Ky., North Middletown—North Middletown Deposit Bank remodel interior; contracts to Mansfield & Jefferson, Paris Monumental Works and John Merringer.

La., Baton Rouge—City Comsn. Council let contract at \$13,800 to D. E. Chapman for brick bldg. for city dock offices; 1 story and basement, 82x36 ft.; Lewis A. Grosz, Archt., Raymond Bldg. 10-31

Tex., Dallas—Republic National Bank & Trust Co., Wirt Davis, Vice Chmn. of Board, advises will soon start work on 18-story addition; finish similar to present structure;



first 3 floors and basement for banking quarters, offices above; \$1,000,000; Inge Construction Co., Contr., Burt Bldg.

Tex., Fort Worth—T. T. Thompson, 5137 Mabry St., has contract to excavate for \$1,000,000 office bldg., Fifth and Main Sts., for R. O. Dulaney, Petroleum Bldg., and associates; W. G. Clarkson & Co., Archts., Harry B. Friedman, Contr., both First Natl. Bk. Bldg. 8-15

Tex., Port Arthur—Following sub-contracts let for \$150,000 remodeling work on Merchants National Bank: Orna. and misc. iron, Decatur Iron & Steel Co., Decatur, Ala.; vault, Mosler Safe Co., Hamilton, O.; marble, Vermont Marble Co. of Texas, 1513 Wall St., Dallas; gravel, American & Venetian Marble Co., 615 Julia St.; orna. stone, Orleans Cast Stone Co.; plastering, Monahan Plastering Co., Canal Bank Bldg.; bronze and iron work, American Sheet Metal Works, 331 N. Alexander St.; acoustical treatment, Nachary Plastering Co., 802 Perdido St., all New Orleans, La.; lumber, Martin Lumber Co., 401 6th Ave.; plumbing, Port Arthur Plumbing Co., 428 Ft. Worth Ave., both Port Arthur; struct. steel, Orange Car & Foundry Co., Orange, Tex.; Favrot & Livaudais, Ltd., Archts., Hibernia Bldg.; Underwood Contracting Corp., Contr., Louisiana Bldg., both New Orleans. 10-24

### Churches

D. C., Washington — Rosslyn Steel & Cement, 3031 K St., N. W., Washington, has rein. steel contract for \$1,750,000 National City Church for Disciples of Christ; struct. steel, Dietrich Bros., Baltimore, Md.; cut stone, Bedford Cut Stone Co., Bedford, Ind.; other sub-contracts not let; John Russell Pope, Archt., 542 Fifth Ave., New York; Geo. A. Fuller Co., Contr., Munsey Bldg., Washington. 9-19

La., New Orleans—Rev. J. J. Johnson is pastor of church to erect auditorium and parsonage, N. Prieur and St. Louis Sts., after plans by O. P. Mohr, Canal Bk. Bldg.; Walker Construction Co., Contr., 223 Cadiz St., receiving sub-bids.

Tex., Dallas — Greenville Ave. Christian Church, Rev. Ben M. Edwards, Pastor, let contract to Eckert-Burton Co. to complete bldg.; \$60,000; Clarence C. Bulger, Archt., Const. Indus. Bldg. 9-26

W. Va., Huntington — First Presbyterian Church started work on rebuilding structure damaged by fire; renovate old annex, erect third story; Sidney Day, Archt.; Walter L. Robinson, Contr. 11-7

### City and County

Tex., Paducah—Following sub-contracts let on \$200,000 Cottle County courthouse: Lathing and plastering, Harry M. Lux; metal joist and Hyrib metal lath, Truscon Steel Co.; toilet stalls and partitions, and vault doors, Lusco Brick & Stone Co., all Wichita, Kan.; rein. steel, Austin Bros., 1815 Coombs St.; cement tests, Robt. W. Hunt Co., Const. Indus. Bldg.; metal windows and kalamain doors, Gilbert Manufacturing Co., Marvin Bldg., all Dallas, Tex.; painting, H. B. Lehr, Box 1411, Lubbock, Tex.; lumber, Paducah Lumber Co., Drummond Crump, and Higginbotham Bartlett, all Paducah, Tex.; struct. and misc. iron, J. B. Klein Iron & Foundry Co., 1004 W 2nd St., Oklahoma City, Okla.; millwork, Falls Sash & Doors, 302 Oak St., Wichita Falls, Tex.; Voelcker & Dixon, Archts., Perkins-Snyder Bldg., Wichita Falls; H. W. Underhill Construction Co., Contr., Wichita. 10-3

### Dwellings

Ala., Birmingham—A. W. Mangum, 806 Millan Ave., let contract to J. V. Dodson, 307 S. Ninth St., for residence; brick veneer, 1 story, comp. roof; Turner & Slater, Archts., Martin Bldg. 10-3

Ala., Talladega—Brewer Dickson let contract to H. H. Hurst for shingle residence; 1 story, comp. roof, furnace; Miller & Martin, Archts., Title-Guar. Bldg., Birmingham. 10-31

Ark., Bald Knob — El Coleman considers erecting 2 frame dwellings; 1 story, 5 or 6 rooms, oak floors, shingle roofs; owner builds.

Ark., Benton—Henry Finkbeiner erecting 2-story residence, N. Market St.; 10 rooms, oak and pine floors; owner builds.

Ark., Benton—H. W. Anderson erecting frame residence, N. Market St.; 2 stories, 8 rooms, pine and oak floors, wood shingle roof; Henry Spraggins, Contr.

Ark., Malvern — Wm. T. Murray, J. M. Wells and A. J. Wells each erect brick veneer residence; 1 story, 5 or 6 rooms, oak floors, comp. roofs; owners building.

D. C., Washington—W. C. & A. N. Miller have permit for \$30,000 dwelling, 4914 Glenbrook Rd., N. W., 3 stories, and for \$75,000 dwelling, 5101 Tilden St., N. W.; also erect dwelling, 4928 Indian Lane, N. W.; G. E. MacNeil, Archt., both 1119 17th St., N. W.; owner builds.

D. C., Washington—F. M. McConihe & Co., 1008 Connecticut Ave., have permit for \$50,000 dwelling and garage, 6 Kalorama Rd., N. W.; brick and conc., 3 stories; \$53,000.

Fla., Coral Gables, Miami—Sidney R. Carroll, 1218 Salzedo St., erect 2 rein. conc., conc. block and stucco dwellings, Alhambra Circle; 2 stories, 60x92 ft., tile and oak floors, 4 tile baths, tile kitchen walls, steel sash, cast stone and iron work, tile roof; \$60,000; owner builds.

Fla., Lake Wales—Dr. A. R. L. Dohme, care Sharp & Dome, Baltimore, Md., let contract to G. A. Miller, Inc., 312½ Twigg St., Tampa, Fla., for \$40,000 residence, Mountain Lake; Parsons & Wait, Archts., 1 Beacon St., Boston, Mass.; work started. 10-31

Fla., Miami—New Miami Shores Corp., 9533 N. E. 2nd Ave., erect \$10,000 dwelling, 134 N. E. 102nd St.; rein. conc., conc. block and stucco, 1 story, 35x52 ft., garage; C. W. Bell, Constr. Supvr.

Fla., Miami Beach—Mrs. F. N. Beegle, 4374 Bay Rd., erect 2-story residence, 61st St. and Collins Ave.; 42x96 ft.; John & Coulton Skinner, Archts., French Village; Wm. F. Bonsack, Contr., 1639 Alton Rd.

Fla., Miami — Wm. Hoffman Co., care Crow-Dodd Co., 308 N. E. First St., erect \$15,000 dwelling and garage, Alton Rd. near 25th St.; rein. conc. and conc. block, 2 stories, tile and wood floors, tile and comp. roof, cast stone, steel sash, iron work; Frank Wyatt Woods, Archt., Ingraham Bldg.; E. G. Horne Construction Co., Contr., 1016 Alhambra Circle, Coral Gables.

Fla., Palm Beach—Chas. E. F. McCann, care Douglas, Armitage & McCann, 233 Broadway, New York, let contract on cost plus basis to Harry R. Corwin & Co., Inc., Peruvian Ave., Palm Beach, for \$40,000 patio and addition to residence; Golf View Rd.; Marion Sims Wyeth, Archt., Wyeth Bldg., Palm Beach. 10-31

Fla., Vero Beach—Mrs. James A. Ford let contract for \$10,000 Spanish type residence, Riomar; contract let.

Ga., Augusta—I. S. Peebles, Jr., Marion Bldg., let contract to Verdery & Co., for brick veneer residence; 2 stories, 68x38 ft., hardwood floors, slate roof; Scroggs & Ewing, Archts., S. F. C. Bldg. 10-31

Ga., Atlanta—Jas. B. Allen, 918 Cypress St. N. E., erect brick veneer residence; 1 story and basement, conc. footings, hardwood floors, 2 tile baths, comp. shingle roof; E. Morris, Contr., Healey Bldg.

La., New Orleans — Henri G. DeFraitres, Contr., 391 Camp St., alter and erect addition to dwelling, Peters Ave. and Laurel St.

La., New Orleans—L. D. Rouyer, Contr., 1124 Gov. Nichols St., erect double dwelling, Republic St. near Law St.

Md., Baltimore—J. J. Hurst, Bldr., 413 St. Paul St., considers erecting \$70,000 dwelling, Cotswold Rd. near Charles St., Homeland; stone, 3 stories.

Md., Baltimore—Dunning Bros., Inc., erect 3 frame dwellings and garages, 814-18 Evesham Ave.; 2½ stories, 22x27 ft., hot water heat; \$10,500; E. C. Minor, Archt., 2309 N. Charles St.; owner builds.

Md., Baltimore—Chas. E. Litzinger, Bldr., erect 25 brick dwellings, 1100-48 Roland Heights Ave.; 2 stories; 12x34 ft., slag roofs, steam heat; \$55,000; Fredk. E. Beall, Archt., 306 St. Paul St.; owner builds.

Md., Baltimore — Parkway Development Co. erect 44 brick dwellings, 700 block Northern Pkwy., after plans by Geo. W. Ritter, Archt., 620 N. Hilton St.; 2 stories, 21 x 37.6 ft. and 19 x 33 ft., Carey roofs, hot water heat, owners build. 11-7

Md., Baltimore — J. S. Downing, Bldr., 2609 Greenmount Ave., erect stone and brick dwelling, Murray Hill Rd. near Bellona Ave.; 2½ stories.

Md., Baltimore — Clifton K. Wells, Jr., Bldr., 3538 Old York Rd., erect dwelling, Murray Hill Ave.; also one on Charles St. Ave. near Bellona Ave., Murray Hill.

Md., Baltimore—George Benkert erect 6 dwellings, 3206-16 W. Baltimore St.; \$16,000; 2 stories, 15x44 ft., slag roofs; owner builds.

Mr., Baltimore—L. E. Breuninger & Sons have permit for \$12,500 dwelling, 1412 Floral St., N. W.; stone, 2 stories; plans and constr. by owner.

Md., Baltimore—John Welsh, Bldr., 11 E. Fayette St., erect 10 brick dwellings, 3300-18 Leighton Ave.; 2 stories, 19x30 ft. and 19x20 ft., slag roofs; \$30,000; Geo. Wessel, Archt., 601 W. 40th St.

Mo., St. Louis—Wm. H. Kaysing, Pres., Kaysing Iron Works, 2701 N. 25th St., erect \$32,500 English type residence, Clayton and Hanley Rds., Lake Forest; whitewashed brick, 8 rooms, 3 baths, 2 car garage; Saum Bros., Archts., 713a Chestnut St.; work by sub-contract.

Mo., St. Louis—C. Christian, 4955 Delmar Ave., erect 5 brick dwellings, 200 block Sells St.; 1 story, 24x47 ft., shingle roofs, hot air heat; \$17,500; F. G. Avis, Archt., 4977 Neosho St.; Liebowitz Construction Co., Contr., 4955 Delmar St.

Mo., St. Louis—J. Burle, 6042 Wanda Ave., erect \$11,000 brick residence, 3961 Federer Place; 2 stories and basement, 31x32 ft., hardwood floors, tile bath, slate roof, copper sheet metal work; O. C. Farber, Contr., 4315 Kingshighway, S. W.

N. C., Greensboro—Dr. Shahane R. Taylor, Jefferson Bldg., erect \$10,500 residence, Irving Park; brick veneer, 2 stories, hardwood floors, asphalt shingle roof; furnishings, equipment, etc., \$50,000; Harry Simmonds, Archt., Jefferson Bldg.; J. W. E. Lewis, Contr., Freemans Mill Rd.

Okla., Tulsa—B. I. Montgomery erect \$12,500 residence; brick veneer, 2 stories and basement, 29x42 ft.; B. M. Dugger, Contr., 1148 S. St. Louis St.

Okla., Tulsa—Jeff P. Nix, 2536 E. 15th St., considers erecting \$65,000 residence; brick veneer, 1 story, 30x40 ft.; day labor.

Tenn., Memphis—H. A. Haisch erect 2 brick veneer dwellings, 802-94 Philadelphia St.; 1 story, 29x53 ft., tile baths, oak floors, comp. roofs; J. A. Goodwin, Contr., 1128 Cummings Ct.

Tenn., Memphis—G. C. Sanders, 565 Parkway, East, let contract to J. A. Haley, Exchange Bldg., for \$10,000 brick veneer residence; 1 story, 42x62 ft., hardwood floors, 2 tile baths, comp. roof, hot water heat; J. Frazer Smith, Archt., Goodwyn Inst. Bldg. 10-31

Tex., Amarillo—Mrs. J. Carroll Stipp erect \$10,000 residence, 2609 Hayden St., Wolfkin addition; brick veneer, 6 rooms, 2 baths; A. M. Brown, Contr.

Tex., El Paso—Harry Leigh, M. D., 1121 E. River St., let contract to Mrs. M. H. Welch, 3131 Wheeling St., for \$20,000 brick and stucco residence; 1 story, 59x65 ft., patio shape, tile and oak floors; basement under way. See Want Section—Miscellaneous. 10-31

Tex., Galveston — John W. McCollough, 2201 34rd St., erect \$22,000 residence, 4519 Caldecus Place; hollow tile, 2 stories, 14 rooms, 2 baths; Fred G. Butler, Contr., 3519 Q½ St.

Tex., Luling—Walker Bros. erect semi-fireproof residence; Herff & Jones, Archts., S. A. Loan & Tr. Bldg., San Antonio; R. J. McGaffey, Contr., Luling.

Tex., San Saba—Mrs. Laura Kely, San Saba County, erect cobblestone ranch residence; contract let.

Tex., Hereford—O. L. Culwell, Contr., erect residence and garage.

### Government and State

D. C., Washington—J. Geo. Benschel Co., 3005 Shannon Drive, Baltimore, Md., has contract at \$12,890 for skylights, etc., in Treasury Bldg. 10-31

Fla., Ralford—McIntosh & Seymour Corp., Auburn, N. Y., have contract for \$30,000 oil engine, state prison farm.

Tex., Randolph Field, Schertz—Jack Shelton, 440½ S. Alamo St., San Antonio, has barracks excavation contract at \$17,000 to \$20,000 for first unit of Randolph Field; Murch Bros. Construction Co., Contr., Rwy. Exch. Bldg., St. Louis, Mo. 11-7

### Hospitals, Sanitariums, Etc.

Ala., Birmingham — Hillcrest Sanitarium, care Dr. Jas. A. Weston, 7000 S. Fifth Ave., erect brick bldg., Tenth St. and Fifth Ave., South; 3 stories and basement, 34x160 ft., built-up roof; E. B. Van Keuren, Archt., Comer Bldg.; Wallis & Wallace, Contrs. 1-10

Ark., North Little Rock, Little Rock—U. S. Veterans Bureau, Arlington Bldg., Washington, D. C., let contract at \$15,624 to McGregory & Pickett, A. O. U. W. Bldg., Little Rock, for garage, U. S. Veterans Hospital.

Miss., Meridian—Acme Builders Supply Company, Eighth Ave. and A St., Meridian, has millwork contract for \$125,000 service bldg., Mississippi State Hospital; millwork, Decatur Steel & Iron Works, Decatur, Ala.; struct. steel, Connors Steel Co., Empire Bldg., Birmingham, Ala.; R. C. Springer, Archt., Rosenbaum Bldg., Meridian; C. A. Pearman, Mech. Engr., Amer. Traders Bank Bldg., Birmingham; Garber & Lewis, Contrs., Jackson, Miss. 10-19

### Hotels and Apartments

Fla., Miami Beach—Miami Ocean View Co., 1151-5th St., let contract to J. L. Berry, Dowling Bldg., for addition of baths and stairs and repairs to Southern Hotel, 6th St. and Alton Road; \$10,000.

Fla., Miami—H. J. Smith, 206 N. E. 2nd Ave., let contract to Maine Delburn Co., Congress Bldg., for roof garden on Alcazar Hotel, Biscayne Blvd. and 5th St.; \$10,000; Fred Weiss, Archt. 8-29

La., New Orleans—Jos. L. Armon, Archt.-Contr., 333 Brockenbraugh Court, preparing preliminary plans for \$30,000, 3-story, brick and hollow tile apartment.

N. C., Charlotte—Home Real Estate & Guaranty Co., 219 N. Tryon St., erect \$25,000, 1-story, 8-room, brick veneer apartment, 415 Ardsley Road; owner, Archt.-Bldr. 10-31

N. C., Greensboro—Sedgefield, Inc., H. P. Hardin, Sec.-Treas., 102 N. Elm St., let contract to H. H. Starr, 606 Courtland St., for solarium as an addition to Sedgefield Inn; Harry Barton, Archt., Jefferson Bldg.

Okl., Oklahoma City—Fitzsimmons & Sherer started work on \$12,500 2-story, brick veneer apartment.

### Miscellaneous

Ga., Macon—C. L. Hoenshel let contract to M. E. Shaw, 656 Ridge Ave., for \$15,000 alterations to Tavern Tea Room, 151-155 Cotton Ave.

Miss., Raymond—H. F. Wallace, Dir., Branch Experiment Station, let contract to S. A. Bradshaw, Planters Lumber Co., Jackson, for 3-story, 30x80 ft., frame seed and fertilizer storage house; corrugated iron roof; conc. and wood floors; owner, Archt.-Engr. 10-24

Tenn., Chattanooga—Chattanooga Baseball Club, Joe Engel, Pres., James Bldg., let contract to Rogers & Leventhal, 822 E. 11th St., for \$100,000, rein. conc., struc. steel, brick and stone stadium; grandstand to seat 10,000 people; comp. roof; plumbing and heating; Jones & Van Der Cammen; electrical, Hayes Electric Co.; J. M. Gauntt, Archt., Hamilton Natl. Bk. Bldg. 10-10

Tex., Raymondville—Delta Orchards, Inc., W. A. Harding, Mgr., erecting \$100,000, 3-story, conc., tile and stucco clubhouse; H. E. Ramey, Contr., Stanley W. Bliss, Archt., Harlingen. 9-26

### Railway Stations, Sheds, Etc.

Fla., Boca Raton—Florida East Coast Rwy. Co., L. C. Frohman, Asst. Engr., St. Augustine, let contract to Johnson Finance & Construction Co., Atlantic Natl. Bank Bldg., Jacksonville, for passenger depot. 9-26

La., Eunice—Texas and Pacific Ry. Co., R. F. Mitchell, Ch. Engr., Dallas, started work on \$10,000 freight and passenger depot; L. J. Curtis, foreman in charge.

### Schools

Ark., Guion—School Bd. let contract to Jones & Johnson, Batesville, for 4-class-room tile school.

Ark., Hot Springs National Park—Bd. of Directors, Special School Dist. of Hot Springs, Ed Bardley, Pres., let contract at \$114,421 to H. A. McGuire & Co., Derrmon Bldg., Memphis, Tenn., for 2-story, brick, 11-classroom Malvern Avenue School and 2-story, 8-classroom South Hot Springs School; Irvin D. McDaniel, Archt., First Natl. Bk. Bldg., Memphis; plumbing and heating, J. K. Lecroy; elect. work, Appler Electric Co., both Hot Springs National Park. 10-31

D. C., Washington—District Commrs., 509 District Bldg., let contract at \$257,949 to Skinner & Garrett, 1416 F St., N. W., for additions and improvements to Park View School; A. L. Harris, Municipal Archt. 10-17

Ga., Tennille—Tennille Consolidated School Dist., W. F. Mobley, let contract to W. A. Stillwell & Son, Macon, for 1-story and basement, 226x85 ft. with auditorium, 47x72 ft., brick, limestone trim school. 10-31

La., Lawtell—St. Landry Parish School Bd., W. B. Prescott, Supt., Opelousas, let contract at \$53,633 to R. L. Roland & Son, 1908 Lee St., Alexandria, for 2-story, 68x163 ft., brick school; asbestos slate roof, wood floors; Herman J. Duncan, Archt., 120 Murray St., Alexandria. 10-31

Mo., Cape Girardeau—State Teachers College, Dr. Joseph A. Serena, Pres., let contract at \$42,365 to Gerhardt & Son for first unit of stadium at Houck Field; seat 5400 people; Jamieson & Spearl, Archts., Arcade Bldg., St. Louis. 10-24

Tex., San Antonio—Lady of Lake College erect \$40,000 addition to library and dining room addition, enlargement of kitchen; fireproof; Aug. Fuessel, Contr., 1903 Virginia St.; Leo M. J. Dielmann, Archt., 306 E. Commerce St.

W. Va., Glenville—State Bd. of Control, Jas. S. Lakin, Pres., Charleston, let contract at \$41,921 to Johnson & Gates, Portsmouth, Ohio, for Robert E. Kidd Library at Glenville State Normal. 4-11

### Stores

Fla., Miami Beach—R. L. McClain, C. E. Hoover, Agent, Lincoln Road, let contract to Wm. F. Bonsack, 1059 Alton Road, for 1-story, 50 x 75 ft., rein. conc. and conc. block stucco store, Alton Road between Lincoln Road and 17th St.; cement and wood floors, tile and comp. roof; Carlos S. Schoeppl, Archt., Florida Theatre Bldg., Jacksonville.

Ky., Louisville—B. Snyder, Inc., 524 W. Market St., erecting 3-story and basement, 110 x 150 ft., conc., brick and steel addition and remodeling store; \$150,000; A. Bornstein, Contr., 1219 Logan St. 8-8

Miss., Summit—H. L. Whitworth, Mayor, let contract to Fuller & French, McComb, for rebuilding burned structure.

Mo., St. Louis—American Furniture Co., 708 Franklin St., has permit for \$30,000, 2-story store and office building, 3301-3 Meramec St.; 125x45 ft., brick, comp. shingle roof; J. Shulman & Sons, Bldr., 5417 Kingshighway, S. W.; B. Shapiro, Archt., Syndicate Trust Bldg.

Mo., St. Louis—Frank Rice, Rice-O'Neill Shoe Co., 1113 S. 12th St., erect 2-story and basement, 60x99 ft., brick, rein. conc. and terra cotta and office, 18th and Olive Sts.; Preston J. Bradshaw, Archt., 718 Locust St.; Cornet Casey Co., Contr., Chemical Bldg.

N. C., Greensboro—S. H. Kress Co., 114 E. Fourth Ave., New York, has permit for \$250,000, 4-story store on 200 block S. Elm St.; 3 stories in front, 5 stories in rear, 60x160 ft., rein. conc., brick, terra cotta front, fireproof; G. A. Miller, Inc., Contr., 312½ Twigg St., Tampa, Fla.; Edward F. Sibbert, Archt., 441 Lexington Ave., New York.

S. C., Greer—J. C. Cunningham erect \$20,000, 2-story and basement, 100x85 ft., brick, semi-fireproof store and office, Trade and Randall Sts.; owner, Archt.-Bldr.

Tex., Fort Worth—Dr. R. D. Talbot, Medical Arts Bldg., let contract to Quisile & Andrews, 2212 W. 7th St., for \$19,994, 1-story, 100x100 ft., brick store; comp. roof.

### Warehouses

Tex., Fort Worth—Butcher & Sweeney, Contrs., 806½ Taylor St., have permit for \$15,000 brick and tile warehouse, E. Sixth and Pecan Sts.

Tex., Houston—Houston Paper Co., Mike Maltz, V.-P., 814 Commerce St., let contract to J. B. Townsend, Post-Dispatch Bldg., for \$70,000, 1-story, conc., California stucco warehouse, Franklin and Commerce Sts.; Joseph Finger, Archt., Democratic Bldg.

### Frisco Car Loadings Heavy

Car loadings on the lines of the St. Louis-San Francisco Railway have for the third consecutive month exceeded those of any corresponding month in the company's history, according to a statement issued early in November from the general office at St. Louis. August and September loadings were much higher than during the same months in previous years and figures for the October loadings show estimated earnings for the month of \$9,000,000, with freight earnings the highest in the Frisco's history.

### Building Hydro-Electric Project In Missouri

Mo., Lebanon—The Management and Engineering Corp., Chicago, are both engineers and contractors for the hydro-electric development now being undertaken on the Little Niangua River near the Southern end of Camden County, 27 miles from here, by the Central States Power & Light Co., Chicago. This plant, which will develop 3000 kilowatts under a 40-foot head, will consist of a dam 17 feet high and 400 feet long, a power house for the two generating units, and a tunnel 13 feet square to be drilled through an 800-foot limestone cliff. Construction is being handled by the Management and Engineering organization, contracts for materials and for a small amount of equipment having already been let. C. M. Stanley is assistant hydraulic engineer for that corporation, and D. B. Martin, superintendent of construction.

### Constructing 50-Mile Rail Line

Miss., Meridian—The Meridian and Bigbee River Railway Co. has been authorized by the Interstate Commerce Commission to issue \$1,500,000 first mortgage bonds for reimbursing the company's treasury for expenditures being made in constructing a 50-mile railroad from this city to Myrtlewood, Alabama, where a connection will be made with the Louisville and Nashville. A 30-mile stretch of this line has been completed and the remaining 20 miles is scheduled for completion during 1930. The Southern Finance & Construction Corp., Meridian, is the contractor.

G. M. Neville is president of the Meridian and Bigbee, which connects in this city with the Illinois Central, the Gulf, Mobile & Northern, the Southern and the Mobile & Ohio railroads; at Cromwell, with the Alabama, Tennessee & Northern; at Choctaw, with the Sumter & Choctaw Railway, and at Tombigbee, with the Inland Waterways.

### To Plant Gladioli Bulbs

Winter Park, Fla.—D. J. Elder, formerly of Indianapolis, Ind., will plant this season 1,000,000 bulbs in the gladioli garden section of the Winter Park Ferneries. This place is rapidly advancing as a leading bulb and fern growing center, as indicated by the number of ferneries now under cultivation and by announcements of other growers that thousands of bulbs will be planted for gladioli culture. Mr. Elder, of the firm of Elder Brothers, wholesale florists of Indianapolis, after investigating sites in various sections of the country for a period of several years, chose the Winter Park section as being the best for his needs.



# WANT SECTION

## THE CLASSIFICATIONS IN THIS SECTION ARE:

### Machinery and Supplies

Under this heading are reported requests for data, prices and literature and information on machinery, supplies and miscellaneous materials of a wide variety.

Items in this department are published without charge and these columns are open for the publication of wants of all kinds relating to construction work, machinery, materials and supplies.

### Building Materials and Equipment

This division comprises all classes and kinds of materials and equipment used in building and construction projects of every kind.

### Bids Asked

Includes bids asked by U. S. Government, States, districts, municipalities, firms and individuals for machinery, materials, supplies and construction work.

### Machinery and Supplies

E. W. Swift, Inc., Evansville, Ind.—Wants prices and data on following for sand pit:

- (1) Cars (Side Dump)—small capacity
- (2) Locomotive (Gasoline)—small
- (3) Rail—1 mi., industrial.

Boiler.—C. M. Wall & Son (Mfrs. box shooks, box lumber, etc.), Lexington, N. C.—Wants prices and data on 200-h.p., high pressure boiler, pass insurance inspection to carry 150 lbs.

Dredge (Sand and Gravel).—B. B. Daugherty, Boone, N. C.—Wants prices and data on used dipper to lift sand out of river.

Dredge.—H. W. Dexter, Room 320, Central Y. M. C. A., Columbus, Ohio—Wants prices and data on steel huff for dredge or complete bucket dredge, 2 yd. capacity, approx. 30x90 ft., delivery along Atlantic Seaboard, used, for client.

Retorts (Pine Distillation).—F. C. Barnes, 547 Oak St., Jacksonville, Fla.—Wants prices and data from manufacturers of retorts to extract tar, pine oil, turpentine by distillation of pine wood.

Windlass.—Ivan Bunge, 55, Rue Jules-Siegfried, Le Havre, France—Wants prices and data on steam and electric windlass.

Guyan Machine Shope, Box No. 1298, Logan, W. Va.—Wants prices and data on following:

- (1) Generators—d. c., 550 volt, direct connected to steam engine, preferably 400 kw.
- (2) Generator (Motor)—150 to 200 kw., 250 volts, d. c., 2300 volts, 3 phase, 60 cycle, a. c.
- (3) Hoist—for I beams, 250 volts, d. c., 1 or 2 ton capacity
- (4) Lathe—for turning steel tires and steel locomotive wheels up to 40 in. diam. and from 32 to 48 in. gauge
- (5) Punch and Shear—preferably No. 1½ Buffalo Universal Iron Worker
- (6) Tool Cribs, Tool Bins and Steel Shelving—for tool room and supply house
- (7) Transformers—3-50 kv-a., 60 cycle, 440-206 volts
- (8) Welding Machines—200 to 300 ampere, gasoline driven.

Hackley Morrison Co., Inc. (Mehy. Dealer) 1708-1722 Lewis St., Richmond, Va.—Wants prices and data on following:

- (1) Boilers (Fire Box)—3, 100 to 125 h. p., portable, 100 to 125 lb. pressure
- (2) Hoists (Chain)—2, 3 ton.

### Miscellaneous

Sprinklers (lawn).—Mrs. M. H. Welch, Contr., 3181 Wheeling St., El Paso, Tex.—Wants prices on lawn sprinklers.

Castings.—O. E. Holz Machine & Engine Works, Lagrange, Tex.—Wants prices and data on castings for guy derrick which has round timbers with following sizes: Mast top 22 in., bottom 24 in., boom top 20 in., bottom 22 in.; prefer boom point and similar fitting on bottom of boom.

Plymouth Rock Hatchery, Inc., K. S. Clark, Pres., McIntyre Bldg., Asheville, N. C.—Wants prices and data on following:

- (1) Brooders
- (2) Brooder Stove
- (3) Fencing.

### Building Material and Equipment

A. A. Callaway, Archt., Brownsville, Tex., wants prices on following for 8-story store and hotel under construction for Victor Junco.

Elevators (2)—hand power, 3x4 ft.

Chas. H. McCauley, Archt., Jackson Bldg., Birmingham, Ala., wants prices on following for \$15,000 store for Shepherd-Sloss Realty Co.:

- Flooring—hardwood
- Limestone
- Metal Ceilings
- Roofing (flat)—built up
- Steel Sash.

Consolidated Engineering Co., 20 E. Franklin St., Baltimore, Md., wants prices on following for \$75,000 moving picture theatre for Edmondson Amusement Co.:

- Cast Stone
- Marble
- Metal Doors
- Plaster Board
- Tile—hollow
- Brass and Bronze Work.

E. H. Eads & Co., Archts., Chickasha, Okla., want prices on following for \$15,000 practice house for Oklahoma College for Women, Chickasha:

- Cast Stone
- Electric Refrigerators
- Flooring—hardwood, linoleum, tile
- Incinerator
- Roofing—shingles, built-up
- Steel Sash and Trim
- Wire Glass.

E. H. Roach, Chmn., Bldg. Comm., Graham D. Luhn Post, American Legion, Taylor, Tex., wants prices on following for clubhouse:

- Dumb Waiters
- Flooring—hardwood
- Rolling Partitions
- Brass and Bronze Work.

L. S. Miller, Archt., Brunswick, Ga., wants prices on following for \$10,000 dwelling:

- Flooring—hardwood
- Plaster Board
- Roofing (hip)—shingles shingle
- Steel Sash and Trim
- Tile—hollow
- Terra Cotta Trim.

Morris & Noonan, Archts., Builders Exch. Bldg., San Antonio, Tex., want prices on following for \$27,000 church, Junction, Tex.:

- Cast Stone
- Flooring—linoleum, tile
- Roofing—tile
- Steel Sash
- Tile—hollow.

Rev. R. Excell Fry, Pastor, First Presbyterian Church, Fifth and Walnut Sts., Pine Bluff, Ark., wants prices on following connection with \$15,000 to \$25,000 church repairs:

- Flooring
- Roofing.

Jos. W. Northrop, Jr., Archt., Kirby Bldg., Houston, Tex., wants prices on following for dwelling, Belton, Tex.:

- Electric Refrigerators
- Flooring—hardwood, tile
- Roofing—asphalt, single.

W. T. Coltrane, Contr., 214 Clermont Drive, New Orleans, La., wants prices on following for dwelling:

- Flooring—hardwood, linoleum, tile
- Metal Doors
- Plaster Board
- Roofing—built-up, slate, tile.

### Bids Asked

Bridges.—States of Texas and Oklahoma. Bids for 3 bridges. See Construction News—Bridges, Culverts, Viaducts.

Bridges.—Augusta, Ark. Bids for 13 bridges. See Construction News—Bridges, Culverts, Viaducts.

Bridge.—San Angelo, Tex. See Construction News—Bridges, Culverts, Viaducts.

Bridge.—State of North Carolina. See Construction News—Roads, Streets, Paving.

Bridge.—Beaufort, N. C. See Construction News—Bridges, Culverts, Viaducts.

Bridge.—Hondo, Tex. See Construction News—Bridges, Culverts, Viaducts.

Cleaners, etc.—General Supply Committee, Washington, D. C.—Bids Nov. 21 for following supplies for period Jan. 1 to Mar. 31: scouring compounds, linoleum cleaner, soaps, bluing, corn and fibre brooms, lye, mop handles, mops, laundry soda and laundry starch.

Dikes.—Missouri—See Construction News Columns—Miscellaneous Construction.

Elevator.—Treasury Dept., Office of Supervising Archt., Washington, D. C.—Bids Nov. 29 for complete elevator plant in Asheville, N. C., U. S. post-office and courthouse.

Guard Rail, Bridge and Equipment Paints.—State Bd. of Control, R. I. Tennant, Austin, Tex.—Bids Nov. 25 for paints for guard rail, bridge and equipment: 11,625 gal. lithophone paint, 3,350 gal. red lead bridge paint, 1,575 gal. battleship gray equipment paint, 4,900 lb. aluminum powder, 3,300 gal. long oil spar varnish, 9,620 gal. raw linseed oil.

Laundry Soap.—U. S. Engr. Office, Huntington, W. Va.—Bids Nov. 20 for laundry soap.

Laundry and Dry Cleaning Machinery.—Q. M. Supply Officer, Washington, D. C.—Bids Nov. 29 for dry tumblers, bosom pressers, collar and cuff presses, garment presses, collar shaper, dry cleaning extractor, garment press.

Laundry Equipment.—Marine Corps, Q. M. Dept., Washington, D. C.—Bids Nov. 19 for double sleeve ironer, 3 palls, 3 irons; delivery Quantico, Va.

Lift Trucks and Platforms.—Marine Corps, Q. M. Dept., Washington, D. C.—Bids Nov. 20 for 2 lift trucks and 170 platforms, delivery Quantico, Va.

Machine Shop Equipment.—Bureau of Supplies, Navy Dept., Washington, D. C.—Bids Nov. 26 for following: milling machine, hob and cutter grinder, motor-driven drill grinder, motor-driven bench precision lathe, motor-driven wood milling machine; Dec. 3 for motor-driven crank shaper.

Metal Partitions.—Treasury Dept., office of Supervising Archt., Washington, D. C.—Bids Nov. 22 for metal partitions in U. S. internal revenue building, Washington, D. C.

Miscellaneous Handles.—U. S. Engr. Office, Huntington, W. Va.—Bids Nov. 25 for miscellaneous handles.

Miscellaneous.—Panama Canal, Office of Gen. Pur. Officer, Washington, D. C.—Bids Nov. 27, for following, Sch. 2508:

Steel plate, iron or steel sheet, struc. steel, angles and channels: soft steel, w. l. or steel galv. pipe, cast-steel wire rope, manilla rope, sheet copper, sheet lead, etc.

Overpass.—Tulsa, Okla. See Construction News—Bridges, Culverts, Viaducts.

Paving.—Houston, Tex. See Construction News—Roads, Streets, Paving.

Pipe (Segment Block).—See Sewers.

Pipe (Concrete).—See Sewers.

Pipe (Vitrified).—See Sewers.

Radio Tubes.—Marine Corps, Q. M. Dept., Washington, D. C.—Bids Nov. 19 for 25 transmitting tubes and 500 receiving tubes; delivery Washington, D. C.

Reconstruction of Shipbuilding Ways.—Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C.—Bids Nov. 27 for constructing rein. conc. shipbuilding ways, 605x100 ft. at Navy Yard, Philadelphia, Pa.

Roads.—State of Arkansas. Bids for 5 roads. See Construction News—Roads, Streets, Paving.

Roads.—Dallas, Tex. Bids for 2 roads. See Construction News—Roads, Streets, Paving.

Roads.—State of Texas—Bids for 19 roads. See Construction News—Roads, Streets, Paving.

Roads.—State of Louisiana. Bids for 2 roads. See Construction News—Roads, Streets, Paving.

**Roads.**—State of North Carolina. Bids for 9 roads. See Construction News — Roads, Streets, Paving.

**Road.** — Towson, Md. See Construction News—Roads, Streets, Paving.

**Road.** — Dallas, Tex. See Construction News—Roads, Streets, Paving.

**Road.**—Fort Worth, Tex. See Construction News—Roads, Streets, Paving.

**Sand Blast Room & Equipment.**—Ch. Bureau of Yards and Docks, Navy Dept., Washington, D. C.—Bids Nov. 20 for sand blast and dust collecting equipment at naval operating base (air station), Hampton Roads, Va.

**Scales.**—Bureau of Customs, Treas. Dept., Washington, D. C.—Bids Dec. 3 for construction and installation complete and in working order in Port of Boston, New Orleans, La., New York; and for reconstruction and installation in port of Boston and New Orleans, Treas. Dept. automatic weighing and recording scales.

**Sewers.**—City of Houma, La., Sewerage District No. 1—Bids Nov. 25 for following material for construction of sanitary sewer system: Sewer pipe; manhole rings and covers; cleanout castings, etc.; address Dreux Angers, Clk., or Municipal Engineering Co., Athletic Club Bldg., Dallas.

**Sewers.**—Commrs. of Sewerage, Louisville, Ky.—Bids Nov. 19 for constructing Raymond

Ave. Sewer, Contr. No. 44, including: 1370 ft. of 15-in., 21-in., and 24-in. vit. pipe; 790 ft. of 27-in. conc. or vit pipe; 560 ft. of 36-in. conc. or seg. block pipe; manholes outlet structures, diversion and regulator chambers, etc.; Woolsey M. Caye, Technical Engr.

**Steam Traps and Valves.**—Marine Corps, Q. M. Dept., Washington, D. C.—Bids Nov. 21 for 11 valves and 4 steam traps, delivery Quantico, Va.

**Steel Shafting.**—U. S. Engr. Office, Huntington, W. Va.—Bids Nov. 20 for cold rolled steel shafting, round.

**Street.**—St. Louis, Mo. See Construction News—Roads, Streets, Paving.

**Washed and Screened Gravel.**—Louisiana Highway Comm., O. K. Allen, Chmn., Baton Rouge, La. Bids Nov. 26 for washed or screened gravel, 40% sand-clay gravel, reef shell, clam shell, crushed limestone, slag and sand.

**Wharf Repairs.**—Baltimore, Md. See Construction News Columns—Miscellaneous Construction.

**Window Glass.**—Marine Corps, Q. M. Dept., Washington, D. C.—Bids Nov. 21 for 2300 pieces window glass, delivery Quantico, Va.

**Wire Cloth (Screen).**—Marine Corps, Q. M. Dept., Washington, D. C.—Bids Nov. 20 for 50,000 sq. ft. wire cloth screen; delivery San Francisco, Calif.

#### Linde Air Products Exhibit.

The Linde Air Products Company, New York, and associated companies will occupy booths 334-335 at the Power Show to be held at the Grand Central Palace, New York, December 2-7. Prest-O-Lite acetylene and Linde oxygen, Union carbide and carbide in drums and various welding accessories will be shown; a feature will be the first showing of the new Oxweld type W-17 low pressure welding blowpipe.

#### Virginia Bureau of Research.

Beginning operations September 3, the Virginia Bureau of Research, Inc., Richmond, was organized to make non-partisan investigations on social, economic and political conditions in the various states, with the purpose of assisting newspapers, legislators, government officials, business men and the interested public in securing data. Westmoreland Davis is president of the bureau and Robert C. Smith, director.

#### Milburn Office in Los Angeles.

An office has been opened at 1855 Industrial street, Los Angeles, Cal., by the Alexander Milburn Company, Baltimore, Md., manufacturers of welding and cutting apparatus, portable carbide lights and paint and lacquer spraying equipment. The Los Angeles office will operate as the Alexander Milburn Sales Company.

#### Buy Kankakee Factory.

The American Asphalt Paint Co., Chicago, has purchased a factory building at Kankakee, Ill., containing approximately 100,000 square feet of floor space available for manufacturing. A complete line of asphaltic products will be manufactured soon at the Kankakee plant, where new paint making equipment is being installed.

### Trade Literature

**Grate Stoker.**—Catalog GND-2, illustrating and describing the Green natural draft chain grate stoker is being distributed by the Combustion Engineering Corporation, New York, a subsidiary of the International Combustion Engineering Corporation. This type of stoker is serving more than 12,000,000 square feet of boiler heating surface in industries of every kind. Southern offices of the Combustion Engineering Corporation are maintained in Atlanta, Charlotte, Houston, Kansas City, Memphis, New Orleans and St. Louis.

**Texas Opportunities.**—A diversification number of Texas Opportunities, a publication of the Texas Power & Light Co., Dallas, was recently issued, containing among other interesting articles a treatise on the subject of diversification by W. H. Darrow, extension editor of the A. & M. College of Texas. The magazine is published in the interest of Texas' industrial, commercial and agricultural development and is edited by Beeman Fisher with Wellington Brink as associate.

**Face Brick.**—Two pieces of literature recently issued by the Finzer Bros. Clay Co., Sugarcreek, Ohio, manufacturers of Forestblend face brick, include the third edition of Beauty in Brick, a plan book illustrating and describing the use of Forestblend face brick in construction of homes, and a booklet setting forth in colors the various shades of this brick.

## INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers, whether they are advertisers, or subscribers, or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

#### Two Water Power Plants Offered.

In order to effect a property division, J. R. Harrison, auctioneer, Petersburg, Va., will offer for sale December 12 on the premises at Petersburg, two water power plants fronting on the Appomattox River, known as Eanes Planing Mills. With the proper installation of wheels, these plants should develop 187.5 horsepower, it is said, while their sale affords an opportunity to secure a manufacturing site with excellent railroad and water shipping facilities.

#### Prizes for Gas-Cutting Development.

To encourage developments tending to reduce the cost of gas-cutting and welding, the Alexander Milburn Company, Baltimore, Md., offers prizes of \$3,000 to further the development of apparatus or systems to use illuminating or city gas instead of the more expensive manufactured gases now generally used for cutting and welding. Prizes are divided into three offers of \$1,000 each for 1930, 1931 and 1932, for the best authenticated results accomplished with illuminating or by-product gases. A committee of engineers and the head of a prominent engineering university have been asked to act as advisors and appoint judges.

#### Southern Inaugurates Faster Schedules.

The Southern Railway System has established faster southbound schedules on passenger trains No. 33, the Piedmont Limited, and No. 31, the Aiken-Augusta Special, which also handles cars of the Asheville Special between Washington and Salisbury, N. C. More than two hours were cut from the running time of No. 33, between Washington and Atlanta. Entirely new equipment especially built by the Pullman Company was recently placed in operation for the Crescent Limited, an all Pullman De Luxe passenger train operated between Baltimore and New Orleans, by way of the Pennsylvania Railroad to Washington, Southern Railway System to Atlanta, the West Point Route and the Louisville and Nashville Railroad.

#### Municipal Installations of Manistee Pumps.

Smith & Whitney, contracting engineers and machinery distributors of Dallas, Tex., in a letter to the Manistee Iron Works Co., Manistee, Mich., manufacturers of Roturbo centrifugal pumps, advised that they had sold to the city of Tyler, Tex., a pump for the waterworks station. Tyler has five Manistee pumps which were put into service in 1916 and all are in operation. The same distributors also sold a pump to the city of Ennis, Tex., which has four in service; these were started in 1914 and have operated continuously since without repairs. Pearce, Greeley & Hansen, Chicago, hydraulic and sanitary engineers, in making the inquiry for data relating to Manistee pumps installed in 1917 for the city of Oshkosh, Wis., stated that these pumping units have been in continuous service.

#### Reading Chain Representative.

H. H. Knowles, Pacific Coast representative of the Reading Chain and Block Corporation, Reading, Pa., announces the appointment of the Murry Jacobs Co., Los Angeles, to represent the Reading corporation in Southern California. Harry T. Lynam will be in charge of the Los Angeles office, where a stock of chain blocks will be carried. The Reading company manufactures overhead conveying equipment, including the Reading T-Rail system, hand and electric hoists in various sizes and ratings and enclosed gear chain hoists.

#### Seattle Moves Mountains.

In prosecution of extensive regrade projects in Seattle, Wash., W. B. Barkhuff, chief engineer, worked out with engineers of the Link-Belt Company, Chicago, a system of Link-Belt anti-friction belt conveyors for handling 5,000,000 cubic yards of earth in the Denny-Hill regrade project No. 2. This system is said to be giving eminent satisfaction in moving Denny-Hill into Elliott Bay, the work continuing night and day. George Nelson & Company, Seattle, are the contractors.



**Strauss-Built Bridges.**

Rounding out 25 years of continuous operation under the same management, the Strauss Engineering Corporation, Chicago, has designed and supervised the construction of more than 350 bridges in all parts of the world. A few of these outstanding structures are described and illustrated, some in colors, in a brochure being distributed by the Strauss organization.

**Steelex Walls.**—Under the caption, "Better Walls for Better Homes," the National Steel Fabric Company, Pittsburgh, Pa., has issued an illustrated booklet which tells how Steeltex solves the problems of plaster and stucco walls, reinforcing, damp-proofing, insulating and sound deadening. Southern branch offices of the company are maintained at Atlanta, St. Louis, and San Antonio.

**Brass and Iron.**—Catalog No. 3, a 150-page publication devoted to brass and iron specialties, is being distributed by the Buckeye Iron & Brass Works, Dayton, Ohio. It is illustrated and treats in detail such products as brass valves, whistles, brass cocks, water, gauges, brass specialties, hydraulic valves, iron valves and government valves.

**Motor Patrol Grader.**—Bulletin No. W-29-M, illustrative and descriptive of the Western No. 32 International road grader, is being distributed by the Austin-Western Road Machinery Co., Chicago. The unit is a one-man, patrol grader formed by combining a Western No. 32 grader with a McCormick-Deering 10-20 tractor.

**Nursery Stock.**—The Boyd Nursery Company, McMinnville, Tenn., is distributing its catalog for the season of 1929-1930. The company is a grower of shade trees, ornamental shrubs, evergreens and roses and invites prospective planters to discuss with it their planting problems.

**Business Reports.**—"Reports for Executive Control," a publication of the Policyholders Service Bureau of the Metropolitan Life Insurance Company, New York, describes the standard daily reports employed by 14 prominent organizations representing a wide range of industry.

**Airport Fire Hazards.**—The American-LaFrance and Foamite Corporation, Elmira, N. Y., is distributing a 16-page booklet dealing with fire hazards of the airport and landing field and lists in detail fire-fighting appliances for combating them.

**Brill Electric Cars.**—Four leaflets issued by the J. G. Brill Company, Philadelphia, illustrate and describe four types of electric cars lately built by that company. Leaflet No. 22732 is devoted to the Master Unit single-end four-wheel demonstration car; Bulletin 22768 covers heavy-duty surface line cars; Bulletin K-946 is devoted to a standard single-end and eight-wheel Master Unit car and Bulletin 22804 shows the double-end eight-wheel Master Unit type.

**Big Bend Section of Texas.**—In the heart of the Davis Mountains, at an altitude of 4484 feet, is the town of Alpine, Texas, county seat of Brewster County, which occupies the greater part of the Big Bend section. The town is reached by the Southern Pacific and Santa Fe railways and by several improved highways. A folder issued by the Brewster County Chamber of Commerce, Alpine, tells of the section's advantages.

**Industrial Safety.**—Safe Practices Pamphlet No. 42, published by the National Safety Council, Chicago, is a compilation of experience in accident prevention. The subject matter is not to be confused with Federal, State or insurance requirements, or with national safety codes.

## ASKS BIDS ON LARGE TOBACCO PLANT

**American Tobacco Company to Build \$1,000,000 Structure in Richmond**

Richmond, Va.—The American Tobacco Company, Inc., opens bids November 18 for constructing a big manufacturing plant here, estimated to cost \$1,000,000, exclusive of equipment. The main building will be 268 by 66 feet, 6 stories, with a 4-story section in the rear, 268 by 128 feet, for raw material storage. The factory section will be used exclusively, it is said, for the manufacture and packing of cigarettes, while the present building will be used for preparing the tobacco. A powerhouse of 2000-horsepower capacity is also contemplated. Equipment for the plant is estimated to cost \$2,500,000. J. E. Sirrine & Co., Greenville, S. C., are the engineers.

## Elevator and Feed Mill

St. Joseph, Mo.—Excavation has been completed and piles are being driven for the foundation of a feed mill and elevator building here for the Famo Feed Milling Co., recently incorporated. The structure will be 31.6 by 32.6 feet, 130 feet high, and initially will be equipped with necessary receiving and cleaning machinery for use as a grain elevator. Its construction is so planned, however, as to permit the installation of a mixed feed plant later. Building contract has been awarded to the Industrial Engineering Co. and pile driving contract to E. A. Whitney & Sons, both of Kansas City, Mo. Elevator machinery and equipment will be supplied by the Webster Manufacturing Co., Chicago,

Ill. Horner and Wyatt, Kansas City, are the engineers. The elevator is expected to be put in operation in February.

## \$600,000 Hotel Planned

Florence, S. C.—Plans have been completed for the erection of a \$600,000 hotel here for the W. R. Barringer Hotel Company and the date of opening building bids is expected to be announced soon. The building will be 12 stories and basement, of reinforced concrete, brick and limestone, with terra cotta trim, built-up roof, tile and terrazzo floors and metal and wood sash. The ground floor will contain a number of stores, with 170 rooms on the upper floors, which will be served by three elevators and steel stairs. H. A. Underwood & Co., Raleigh, N. C., are the architects and engineers. The following contractors have been invited to bid: Seaboard & Southern Construction Co., Jacksonville, Fla.; Claussen & Lawrence Construction Co., Augusta, Ga.; W. P. Rose Co., Goldsboro, N. C.; John W. Hudson, Jr., Raleigh; Angle-Blackford Co. and Walter Kidde Construction Co., both of Greensboro, N. C.; Southeastern Construction Co. and J. A. Jones Construction Co., both Charlotte, N. C.; J. C. Heslep and W. A. Crary & Son, both Columbia, S. C.; Morris-McKoy Building Co., Greenville, S. C.; Brown-Harry Construction Co., Gastonia, N. C.; North-Eastern Construction Co., Winston-Salem, N. C.; John W. Cowper Co., Richmond, Va., and Buffalo, N. Y.; V. L. Nicholson Co., Knoxville, Tenn., and the Consolidated Engineering Co., Inc., Baltimore, Md.

## Spreading the Good News

A. N. Perryman, of the Business Men's Club of Ronceverte, W. Va., writes:

"The MANUFACTURERS RECORD is a master journal which does its work in a way to command the field of Southern industry. Its loyalty to Southern interests and readiness to be used whenever possible in helping to solve local industrial problems are its outstanding characteristics of gentility. The MANUFACTURERS RECORD is not only a journal covering a vast field of technical activities, but it is an institution with a soul committed to the welfare of a great clientele.

"However, what I set out to say was that speaking of the disposition that is made of the weekly copies of the MANUFACTURERS RECORD, I was in the office of a secretary of a Chamber of Commerce the other day and his desk was flanked with rows of the RECORD piled high. What further good they were doing, I do not know. But here is what I do with my copies of the RECORD as executive secretary of the Business Men's Club of Ronceverte. I gather interesting items of progress or review some article for the benefit of the club at each of the weekly luncheons. Each week I bring the back numbers to the Club, where there are those who are glad to get them, and sometimes I find that these numbers continue to circulate.

"This letter has no other motive than to convey to you my impression of the MANUFACTURERS RECORD. \* \* \* I could just as easily have added my appreciation of the very courteous and full manner in which the departments of the RECORD have always answered my inquiries and gladly given me any information asked for."

How many other readers are making such use of their copies of the MANUFACTURERS RECORD?

## \$10,000,000 Louisville Sewer Construction

Some Contracts Awarded and Bonds Sold for New and Enlarging Projects

Louisville, Ky.—Carrying out a comprehensive plan of sewer construction under the supervision of the Commissioners of Sewerage and for which a \$10,000,000 bond issue was voted in the fall of 1928, the following projects are contemplated; 5550 feet of 21- to 51-inch sewer to serve an area of 46 acres in northwestern section of city, estimated cost \$125,000; 3660 feet of 36-inch circular sewer to 6.6-foot reinforced concrete semi-elliptical sewer to serve 136 acres in the southwestern section of the city, cost \$111,000; about 4 miles of 16- to 20-foot outfall sewer to serve an area in excess of 5000 acres in the southern section of the city, estimated cost \$4,000,000; 8680 feet of trunk sewer, 13.6 to 15.6 feet to serve 3000 acres at junction with outfall, cost \$1,223,000; 6600 feet of main sewer varying from 10.9 feet at upper end to 13 feet at lower end, to serve 1500 acres within and without city limits, \$574,000.

There will be 1220 feet of 39-inch sub-main sewer to serve 58 acres, cost \$26,000, and 3580 feet of 27- to 54-inch sub-main sewer to serve 91 acres, cost \$78,000; 8360 feet of trunk sewer, 8 feet at point of outlet and 51 inches at the upper end, the sub-main sewer to vary from 51 inches at its point of outlet to 24 inches at the upper end with a length of 3400 feet, combined cost \$401,000; 1550 feet of 33-inch reinforced concrete circular main sewer to serve 157 acres, cost \$39,000; 5730 feet of 18- to 54-inch main sewer in southeastern section of city to serve 104 acres, \$52,000; 2924 feet of main sewer and 1315 feet of sub-main sewer to serve 119 acres in the southeastern section of the city, sizes to vary from 42 to 30 inches, estimated cost \$137,000; 6200-foot extension of an interceptor to serve the southeastern section of the city, sizes to vary from 33 to 39 inches, cost \$175,000.

Other construction will include 7000 feet of trunk sewer and 1600 feet of sub-main sewer, the former to vary from twin rectangular section, each opening being 7 feet by 6 feet at the lower end to a 36-inch circular sewer at the upper end, while the sub-main sewer will be 39 inches, all to serve an approximate area of 497 acres in the eastern section of the city and to cost \$400,200; 7000-foot extension of intercepting sewer 18 to 24 inches, to serve the eastern portion of city, cost \$100,000; 7800 feet of trunk sewer and 6200 feet of sub-main sewer, the former to vary in size from 10.3 feet of reinforced semi-elliptical section at the lower end to 9.3 feet of reinforced concrete at the upper end, and the latter

to vary from 57 to 15 inches, while another sub-main sewer of 500 feet will vary from 27 to 24 inches, all to serve the northeastern portion of the city and to cost about \$946,000; 3460 feet of sub-main sewer, 39 to 24 inches, to cost \$82,000 and 2639 feet of sub-main sewer, 36 to 15 inches, to cost \$48,000.

In addition to the above projects, the Commission has reserved \$1,128,000 for additional minor projects to be constructed after trunk construction shall have been completed or nearly completed. Estimated costs include engineering, administration, rights-of-way and allowances for construction contingencies which may be encountered after contracts shall have been placed. The first projects to be put under construction are the Brook street sewer, contract No. 42, and the Thirty-eighth street trunk sewer, contract No. 43, for which contracts have been awarded respectively to the L. E. Myers Co., Chicago, Ill., and to the Connell-Conrad Construction Co., Louisville. Bids for the next projects to be awarded under the program will be opened November 19.

Bonds in the amount of \$500,000, a portion of the \$10,000,000 issue authorized, were recently sold, while plans for selling additional bonds have not been determined. Woolsey M. Caye is the technical engineer of the sewerage commission.

### Memphis Federal Reserve Bank Building

The new bank building for the Memphis branch of the Federal Reserve Bank of St. Louis, was recently completed. It represents a cost of approximately \$400,000, including site, and is a 2-story and basement structure, 80 by 128 feet, of reinforced concrete, brick and stone with marble and tile work and composition roof. Plans and specifications were prepared by Mauran, Russell & Crowell, St. Louis, with Jones & Furbringer, Memphis, as associates. W. W. Huff of St. Louis was structural engineer, and the H. J. Gilbertson Construction Co., Memphis, general contractors.

Interior finish of the main floor provides a subdued background for business quarters of the bank, the windows facing Jefferson avenue and Third street permitting an abundance of light intensified by the tint of the walls and the electric fixtures. The main floors contain officers' quarters, committee rooms, paying and receiving tellers' windows; the second floor is devoted to the bank work-

room, including bookkeeping, auditing and accounting departments, and telephone and telegraph operators' offices. The basement affords space for the vaults, the door of the main vault being built of laminated steel of various alloys and weighing 20 tons.

W. H. Glasgow is managing director of the bank; S. K. Belcher, cashier, and C. E. Martin, assistant cashier.

### PLAN BIG APARTMENT DEVELOPMENT

Elaborate Facilities and Airplane Landing Field for Project Near Washington

Washington, D. C.—Plans for erecting a 2000-room apartment building on a site fronting the proposed Rock Creek Park, in Montgomery County, Maryland, have been announced by Brainard H. Warner, Jr. The building, which will be 15 stories high, will provide storage space in the basement for 500 automobiles and contain a swimming pool, gymnasiums and shops. A golf course and an airplane landing field are included in the program. The Maryland National Park Planning Commission has approved the application, and construction on the undertaking is scheduled to begin in the spring.

### Southern Builders Supply Meeting

The eleventh annual convention of the Southern Builders Supply Association is to be held at the Peabody Hotel, Memphis, Tenn., December 9-10. In its November bulletin the Association points out that the building industry is undergoing changes not dreamed of ten years ago, and it is ceaselessly reaching out for success through organized cooperative effort. It extends an invitation to every legitimate building supply dealer to join the Association and take advantage of a program being arranged to interest both members and non-members. Headquarters of the Association are at 1015 Carondelet Street, New Orleans.

### To Manufacture Handkerchiefs

Greenville, S. C.—The Southern Handkerchief Manufacturing Co., capitalized for \$60,000, will manufacture fine handkerchiefs to be distributed through the jobbing trade. Machinery and equipment for production of 1000 dozen daily is now being installed in the recently leased Allen Building, operations to begin by the end of November. It is planned to increase the initial capacity of the plant as operatives can be trained. W. R. Thomason is president and treasurer, and D. A. Boyd, vice-president and general manager of the new company.



## Modernizing Industrial Power Plants

By W. F. SCHAPHORST, M. E., Newark, N. J.

The power plant of a modern industrial establishment is so much more economical and efficient than the plant of ten years ago that owners of old plants are asking themselves some searching questions. For instance: Will it be necessary to start all over again and build a new power plant, or can the present installation be rehabilitated? Can it be made capable of competing with more modern equipment?

My experience has been that in most instances the old plant, particularly the boiler plant, can be brought up to date without great cost. In some instances it can be made better than certain so-called modern plants. And, what is of prime importance, the cost of the modernization will be considerably less than the cost of an entirely new installation would be. As stated by one authority:

"The vast majority of plants built ten years ago can be reconstructed to produce astonishing savings in power costs. In addition to this fact, there has come about a very logical policy of inter-connection between utility and manufacturing plants, whereby it is to the advantage of both parties to work out the most economical local power supply on a co-operative basis."

Heat will pass through an old boiler plate and tube as readily as it will pass through a new plate, provided the plate is kept clean. Indeed, there should be a slight improvement with age, because boiler plates and tubes usually become slightly thinner. Therefore, the tubes should be perfectly clean inside and out. The modern method is to have boiler water so pure that no scale will be deposited. Or, install a deconcentrator. By installing a soot cleaner all ash and soot may be kept off the outside of the tubes.

After placing the boiler itself in Al condition, it is important to have complete and proper combustion, which can almost invariably be secured by increasing furnace volume through installation of modern boiler baffle walls and sometimes modern furnace lining. There must be no air leakage through boiler baffle walls, and there must be no heat leakage through the outside boiler walls. Proper baffle wall design will give correct gas velocity through the passes of the boiler, there will be no slagging. Flexible joints are advisable so there will be no cracking or breaking.

Other devices of importance in the modernization of power plants include a steam superheater, a feed water heater, an automatic feed water regulator, or a modern damper regulator, steam purifier, steam trap, automatic

combustion control system pump governor, steam flow meter, etc. It is possible to do almost anything to an old boiler plant with the exception of making the boiler stronger so that steam pressure can be increased.

### Confirmation of Predictions About Texas Oil Made Thirty Years Ago

Nearly 30 years ago the MANUFACTURERS RECORD published an article by Col. C. F. Z. Caracristi outlining the oil possibilities of Texas, of which but little was known at that time. Like many other things about the South this paper was the first to make the facts known to the world. This particular report is recalled by a letter from R. V. Nichols, Chief of Law Enforcement, offices of the Attorney General of Texas, who, writing to Col. Caracristi, states:

"Allow me to thank you for your letter of August 4, addressed to the Honorable Claude Pollard, Attorney General, as well as your letter of August 12, together with enclosures.

"Also allow me to state that I have read your reports from beginning to end and to say the least, I am very much impressed with the wonderful idea of the great producing oil area as brought out by you in your report published in the MANUFACTURERS RECORD of Baltimore, Maryland, in 1901. I am in possession of a photostatic copy of said report and have carefully compared said report with the producing oil fields of today and am pleased to state that so far as your report goes, not a single county on the Balcones that has been thoroughly tested has failed to produce oil in paying quantities as outlined by you twenty-eight years ago.

"I certainly thank you on behalf of the Attorney General for information that you have given us and hope to hear from you from time to time."

The article to which Mr. Nichols refers in his letter to Col. Caracristi was published in the MANUFACTURERS RECORD of October 3, 1901, and covered 5½ pages, in which Caracristi outlined some of the great possibilities of oil in Texas, then but little understood or comprehended even by many of the oil men of the country.

### Progress Reported by American Chatillon Corporation

Rome, Ga.—Commercial production is increasing rapidly at the plant here of the American Chatillon Corporation, according to a statement by Rufus W. Scott, chairman of the Board, from the New York office of the corporation. To

keep pace with spinning facilities, additional equipment is being continuously installed in the textile and finishing departments. The acetate plant is now producing 2000 pounds daily of Chacelon, the acetate yarn, of 75 denier, 20 filament, while the viscose plant is producing more than 4000 pounds daily of 150 denier, 40 filament, Sunbeam brand rayon yarns. A new mill village of 471 brick houses has been completed and is largely occupied, the dwellings being equipped with porches, electric lighting and steam heat. Regular classes are being conducted in a 14-room school building in the village and a fully equipped cafeteria for employes has been provided. Plans are now being made for a village store.

### \$4,000,000 ST. LOUIS UNION STATION

Facilities Largely Expanded to Handle  
Freight, Express and Passengers

St. Louis, Mo.—Entailing an expenditure of approximately \$4,000,000, the Terminal Railroad Association of St. Louis has completed an expansion program at Union Station in this city which greatly enlarges the passenger, mail, express and baggage facilities. The new section of the station will increase the car-handling capacity of the passenger terminal from 355 eighty-foot coaches to 539, and a new elevator system leading to the subways has been built in harmony with others, while the midway has been lengthened 150 feet. Parking space has been set aside for the accommodation of 160 cars, intended for the use of travelers driving to and from the station in their own cars. All trains will be directed in and out of the terminal from tower No. 1, which has been reconstructed to carry the additional load, and an umbrella type covering has been used for all the new track platforms.

A coach yard covering an area of 28 acres was the first unit of the new improvements completed, in order to make available the site of the old coach yards east of Union Station, for a new express building, one of the largest in the country. The completion of the express building and trackage for handling express trains and cars last April, made it possible to begin work on the major portion of the expansion program. Five old express and baggage buildings were razed and their sites covered with tracks leading into the enlarged station. The subway for mail, baggage and express was expanded and additions made to the freight yards and trackage. Engineering and construction details were handled by Dwight P. Robinson & Co., Inc., New York.

### Tennessee Electric Power Co. Expands Activities

The Tennessee Electric Power Co., Chattanooga, Tenn., recently acquired the properties of the Southern Cities Power Co., Public Light and Power Co., Southern States Ice Co., and Tennessee Water Co.—all in Tennessee—from the Southern Cities Utilities Corp., Walter Whetstone is president of the latter concern with headquarters in Philadelphia.

The Southern Cities Power Co., serves close to 100 communities in Middle and East Tennessee with power plants located on the Duck River at Columbia and Shelbyville and on the Elk River at Estill Springs and at Fayetteville. For a number of years the company has been a large purchaser of power from The Tennessee Electric Power Co. with interconnections maintained at Lenoir City, Murfreesboro, Hohenwald and at the Great Falls and Hales Bar hydro developments of The Tennessee Electric Power Co.

The Tennessee Electric Power Co. itself serves more than 150 communities in Middle and East Tennessee and has four large hydro and three large steam plants in its system. Aggregate installed horsepower rating of the various developments is close to 300,000 horsepower. Principal projects consist of a 54,240 horsepower hydro and a 53,620 horsepower auxiliary steam plant both at Hales Bar on the Tennessee River near Chattanooga; a 30,150 horsepower hydro and 20,100 horsepower auxiliary steam plant, both at Parksville on the Ocoee River and 35,510 horsepower hydro project at Great Falls on the Caney Fork River in Middle Tennessee. A 64,330 horsepower steam-electric plant is located on the banks of the Cumberland River in Nashville.

Power is transmitted over more than 850 miles of power lines. Total electric customers of the Tennessee Electric Power Company on September 1, 1929, were 97,229. Acquisition of the Southern Cities property will increase the number of customers by more than 15,000.

### For Wireless Message System

The Universal Wireless Communication Company, Inc., Buffalo, N. Y., is projecting a wireless message system over the United States and contracts for stations at Laurel, Md., and at Arlington, near Memphis, Tenn., will be awarded within a few days, according to the company, which also contemplates stations at Charleston, Savannah, Jacksonville, Tampa, Atlanta, Spartanburg, Winston-Salem, Charleston, W. Va., Cincinnati, Louisville, Jackson, Miss., Miami, Knoxville, New Orleans, Nash-

ville, Memphis, Birmingham, Mobile, Galveston, San Antonio, Austin, Dallas and Oklahoma City. The first section of the organization was made commercially effective about the first of the year and in the meantime operations have been extended into the territory covered by the cities mentioned. For remote controlled stations, high powered transmitters will be located outside of the city proper, while the larger number of stations will be locally controlled. Rented space will be used temporarily for the proposed stations.

### \$550,000 Port Arthur Hotel Completed

The new Goodhue Hotel erected at Port Arthur, Texas, at a cost of approximately \$550,000, was recently completed, its formal opening marking the successful efforts of the local Chamber of Commerce and citizens of Port Arthur in promotion of the enterprise. The building is owned by the Marine Hotel Co., A. N. Peckham, president.

The structure is 11 stories with a central tower rising 4 stories higher. Architecture is an adaptation of the Mediterranean type to a modern American hotel, and is emphasized in the coloring of tile work and ceiling decoration. Plans and specifications for the hotel—called the Goodhue in memory of J. F. Goodhue, of Port Arthur and Beaumont, who was instrumental in its construction—were prepared by Tisdale, Stone & Pinson of Beaumont, Tex., and Nashville, Tenn. It is operated by the Baker Hotels Co., San Antonio. The Goodhue Co. of Beaumont were the builders with R. R. Sneed, Beaumont, in charge of construction, and C. A. Carmical, general superintendent. A. McSween is manager. Contracts were executed as follows:

**Brass pipe**—Standard Brass & Manufacturing Co., Port Arthur  
**Brick, sand and gravel**—J. Imhoff & Son, Port Arthur  
**Brick work**—Fred Weber, Beaumont  
**Electric fans and installation of fixtures**—Jack Hyde, Port Arthur  
**Electric fixtures**—Stoneburner Electric Co., Port Arthur  
**Electric wiring**—A. & C. Electric Co., Dallas  
**Elevators**—American Elevator Co., Dallas  
**Lumber, paint, etc.**—Martin Lumber Co., Port Arthur  
**Millwork**—Port Arthur Planing Mill  
**Ornamental iron**—Weaver Ornamental Iron Works, Dallas  
**Piling**—Spence-Howe Construction Co., Port Arthur  
**Plastering**—J. H. Herman Co., Beaumont  
**Plumbing and heating**—The Warren Co., Houston  
**Roofing and sheet metal**—H. H. Sanders & Son, Beaumont  
**Tile and marble work**—Gulf Coast Tile & Marble Works, Houston.

The National Fertilizer Association, with executive offices in Washington, D. C., will hold its next annual convention in Atlanta, Ga., November 18, 19 and 20.

### Rivers and Harbors Congress

The National Rivers and Harbors Congress will convene December 10 and 11 for its twenty-fifth convention at Washington. The preliminary list of speakers includes Hon. James W. Good, Secretary of War, on "The Waterway Program;" Hon. S. Wallace Dempsey, Chairman, Committee on Rivers and Harbors, on "Our National Waterway Policy;" Major-General Lytle Brown, Chief of Army Engineers, on "Doing the Work on Waterways;" Senators Thomas J. Walsh, Montana, Royal S. Copeland, New York, and Representative William E. Hull, Illinois, in a symposium on linking of the Lakes with the Ocean, which involves the St. Lawrence route, the Hudson River route and the Lakes-to-the-Gulf route; Senator George H. Moses, New Hampshire, on "The Atlantic Inland Waterway;" Senator Tom Connally, Texas, "The Intracoastal Canal;" Senator Joseph T. Robinson, Arkansas, "Flood Control on Mississippi Tributaries;" Senator Smith M. Brookhart, on "Missouri and Upper Rivers;" Senator Samuel M. Shortridge, California, "Pacific Coast Rivers and Harbors;" Senator Frederic M. Sackett, Kentucky, "The Future of the Ohio River;" Representative Philip D. Swing, California, on "Controlling the Colorado;" and Representative Grant M. Hudson, Michigan, on "An Essential Proviso." The Hon. Ruth Bryan Owen, member of Congress from Florida, and Strickland Gillilan, will address the banquet.

### Florida Citrus Fruit Merger

Tampa, Fla.—Negotiations are in progress for the merger of the Florida Citrus Exchange with executive offices in this city, and Chase & Company, Orlando, the consolidation being influenced by the need in Florida for a unified marketing system and a desire to conform with recommendations of the Federal farm board. Details of the consolidation will be worked out by a merger committee of the board of directors of the Florida Citrus Exchange and officials of Chase & Company. Captain F. C. W. Kramer, Jr., Leesburg, is chairman of the Exchange committee. The Chase company operates citrus packing houses at Arcadia, Auburndale, Crescent City, Frostproof, Geneva, Orlando, Vero Beach, Wauchula, Mims and Winter Haven. Upon the completion of the merger the tonnage of the Florida Citrus Exchange would be increased about one-sixth through the fruit controlled by Chase & Co., the International Fruit Corporation and the Lucerne Park Fruit Association, merger arrangements having been arranged by the Exchange with the latter two companies some time ago.



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# FINANCIAL NEWS

## Bond Issues Proposed

Alabama—State, Bibb Graves, Governor, Montgomery, receives bids Nov. 15 for \$2,500,000 not to exceed 5% highway and bridge, Series K, bonds.

Ala., Birmingham — City Comm., J. M. Jones, Jr., Pres., plans calling election within 60 or 90 days on bonds.

Fla., Sebring — Refunding — Highlands County Commrs. plan \$120,000 bond issue.

Ga., Atlanta—City Council, I. N. Ragsdale, Mayor, may call election Feb. 5, 1930 on \$3,000,000 bonds; \$2,000,000 reconstruct Grady Hospital; \$1,000,000, rebuild Battle Hill Sanitarium. 11-7

Ga., Augusta — School—Richmond County voted \$1,000,000 bonds; Lawton B. Evans, Sec. County Bd. of Education. 8-15

Ga., Woodville—Bd. of Trustees Woodville School Dist., A. G. Wright, Chmn., receives bids Nov. 20, at office of Noel P. Park, Atty., Greensboro, for \$12,000, 5½% bonds.

Kentucky—Bridge—State Highway Comm., Frankfort, receives bids Dec. 10 for \$9,000,000 bonds.

Ky., Covington—City defeated \$475,000 bonds; \$175,000, market house; \$175,000, jail; \$125,000, fire house and improvement. 10-10

Ky., Louisville — School—City, Wm. B. Harrison, Mayor, reported, voted \$3,000,000 bonds. 9-19

Ky., Murray—Jail—Calloway County, T. R. Jones, Judge, defeated \$35,000 bond issue. 8-29

Ky., Winchester—Sewer—City plans \$180,000 bond election.

La., New Orleans—Orleans Parish Levee Bd. authorized \$9,300,000 bond issue: \$1,300,000, reparations purposes; \$8,000,000, lake front improvements, building 5½ mi. conc. seawall along Lake Pontchartrain.

La., Thibodaux—Water—City votes Dec. 26 on \$195,000 bonds.

La., Vinton—Public Dock, etc.—Town considering bond issue.

Miss., Heidelberg—Heidelberg Special Consolidated School Dist., Jasper County, voted \$50,000 bonds. 10-24

Miss., Meridian—City, W. H. White, Clk., Treas., considering \$131,770 bond issue for street improvement.

Miss., Iuka — Courthouse — Tishomingo County defeated \$125,000 bond issue. 10-24

Miss., Vicksburg — Courthouse — Warren County voted \$75,000 bonds; Bd. of Supvrs. plans selling bonds. 10-17

Miss., West Point—Road—Clay County considering \$375,000 bond election.

Mo., Belton — Water, Sewer—City votes Nov. 19 on \$99,000 bonds. Lately noted vote Nov. 15 on \$97,000 bonds. 10-24

Mo., New London—Paving—City voted \$25,000 bonds.

Mo., Pacific—Sewer—City, L. D. Brennan, Clk., defeated \$49,000 bond issue. 10-3

Mo., Southwest City—Prairie Special Road Dist., McDonald County, voted \$7,500 bonds to purchase right of way.

N. C., Charlotte—City Council, Edgar Reed, Clk., considering bond issue for underpass.

Okla., Gate—Water—City, Cay L. Morgan, Clk., voted \$23,000, 6% bonds.

Okla., Roosevelt — Kiowa County Bd. of Education receives bids Nov. 18 for \$40,000 6% Roosevelt School Dist. bonds.

Okla., Sasakwa—City voted \$15,000 bonds for water works and fire equipment.

Tenn., Chattanooga — School — Hamilton County, Will Cummings, Judge, receives bids Jan. 10 for bonds.

Tenn., Chattanooga—City, E. D. Bass, Mayor, receives bids Nov. 24 for \$872,000 bonds: \$573,000, 6%, widen Cherry St.; \$258,000, 4½%, annex North Chattanooga; \$46,000, annex Alton Park.

Tenn., Cleveland—Bradley County considering selling \$100,000 to \$125,000 bonds.

Tex., Angleton—Road—Brazoria County, Scott Gaines, Judge, considering \$3,500,000 bond issue.

Tex., Ballinger—City, K. V. Northington, Sec., probably sell \$187,000 improvement bonds after first of next year; considering issuing \$50,000 or \$60,000 water system revenue bonds.

Tex., Breckenridge—Road—Stephens County plans selling \$100,000 bonds.

Tex., Brownsville—City plans issuing \$500,000 bonds in 1930: \$50,000, sanitary sewer; \$150,000, water and light improvement; \$200,000, paving; \$100,000, park and airport.

Tex., Angleton—Brazoria County, Scott Gaines, County Judge, plans \$1,500,000 bond issue to replace local dist. bonds.

Tex., Columbus—Sewer—City votes Nov. 26 on \$50,000 bonds.

Tex., Corsicana—City votes Nov. 26 on \$400,000 bonds: \$275,000, school; \$50,000, street; \$30,000, incinerator; \$25,000, public market; \$20,000, sewer extension and sanitary improvements.

Tex., Eagle Pass—State Bd. of Water Engrs., Austin, considering application of Maverick County Water Control and Improvement Dist. No. 1, on \$6,000,000 bond issue for combined irrigation and power project on Rio Grande River, above Eagle Pass.

Tex., El Paso—El Paso County, E. B. McClintock, County Judge, voted \$550,000 bonds. \$300,000, Levee road improvement; \$200,000, Upper Valley road; \$50,000 airport road. 10-10

Tex., Goose Creek—Goose Creek Independent School Dist. votes soon on bonds.

Tex., Highland Park, Dallas—City, J. Ben Critz, Mayor, probably receive bids Nov. 19 for \$75,000 library bonds.

Tex., Marfa — Road — Presidio County Commrs. Court called election Nov. 30 on \$600,000 bonds.

Tex., Robert Lee—Road—Coke County, Special Road Dist. No. 2, defeated \$265,000 bond issue. 10-31

Tex., San Angelo — Bridge — Tom Green

County Commrs. considering issuing \$40,000 warrants.

Tex., Texarkana—School Bd., H. W. Stilwell, Supt. of Public School, receives bids Dec. 1 for \$225,000 4½% and 5% Independent School Dist. bonds. 10-24

W. Va., Beckley—Road—Raleigh County, Harper Road Dist., voted \$62,000 bonds. 10-10

W. Va., Charleston—Loudon Dist. Bd. of Education, Kanawha County calls election for Dec. 10 on \$450,000 bonds; Dr. R. H. Dunn, Member of Board. 11-7

W. Va., Moundsville — Marshall County Union School Dist. voted \$140,000 bonds. 10-31

W. Va., Parkersburg—Road—Wood County, Washington Road Dist., voted \$93,500 bonds.

W. Va., Romney—Romney, Springfield, Gore and Mill Creek School Districts vote Dec. 13 on \$150,000 bonds. 9-26


W. Va., Spencer—Road—Roane County, R. L. McCully, Clk., County Court, voted \$62,500 bonds. 10-3

(Continued on page 110)

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We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.

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We Underwrite MUNICIPAL BONDS in States of  
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**Corporate Financing  
Arranged**

*Mergers and Reorganizations Effected*

With connections seeking extensive outlets in constructive financing in the South, this announcement of facilities now available to Southern business houses embraces a most cordial invitation to investigate the solutions offered in response to capital needs. Capital furnished for both new and old enterprises.

**WILLIAM AKERS**

Long Distance Local Phone  
Walnut 3186

1314-15 Atlanta Trust Co. Bldg.  
ATLANTA, GEORGIA

# FINANCIAL NEWS

(Continued from page 108)

## Bond Issues Sold

Ala., Gadsden—City, H. C. Thomas, Ck., sold \$74,000, 6%, \$1,000 denom. street bonds to General Securities Corp., Birmingham, \$74,761 and accrued interest. 10-17

Ark., Hot Springs—School Bd., Ed Bradley, Sec., sold \$261,500 bonds to American Southern Trust Co., Little Rock. 10-17

La., New Orleans—Orleans Parish School Bd., recently sold \$3,000,000, 5% bonds at premium, \$47,307, to syndicate composed of First Union Trust & Savings Bank, Continental Illinois Co., Northern Trust Co., Ames, Emerick & Co., Lawrence Stern & Co., all Chicago; Detroit Co., Detroit, Mich., and Foreman National Corp. 10-24

La., St. Joseph—Water—Town, Josiah P. Scott, Ck., reported, sold \$30,000 6%, \$500 and \$1,000 denom. bonds to National City Savings Bank & Trust Co., Vicksburg, Miss., and F. R. Clark & Co., at par, accrued interest and \$30 premium.

Miss., Meridian—City, reported, sold \$232,000 paving and \$75,000 airport bonds to Commerce Securities Co., 120 Madison Ave.

Miss., Gulfport—Refunding—City Commrs. sold \$50,000 5½% bonds to N. P. and W. H. Hatten, Lyman, \$250 premium.

Miss., Poplarville—Paving—City, E. H. Hyde, Mayor, sold \$80,000 5½% bonds to A. K. Tigrett & Co., Memphis, Tenn.

N. C., Charlotte—Courthouse, Jail—Mecklenburg County, F. M. Gresham, County Auditor, sold \$1,200,000 6% anticipation notes to American Trust Co., Charlotte, at par and \$300 premium.

Okla., Muskogee—City, Robt. P. Chandler, sold \$84,000 4½% bonds to purchase site for city hall, to C. W. Raymon, Watseka, Ill., at par; received no bids on \$161,000 bonds.

S. C., Barnwell—Highway—Barnwell County Directors, Perry B. Bush, Ck., sold \$124,000, 5½%, \$1000 denom. bonds to Taylor, Wilson & Co., Cincinnati, at \$87 premium. 10-24

Tenn., Bristol—School—Bank of Bristol purchased \$75,000 bonds. Lately noted rejected bids. 11-7

Tex., Palestine—School—Anderson County Commrs. purchased \$11,700 bonds of Tennessee Colony, Ward and Cayuga School Districts with Road Dist. No. 8 funds.

Tex., Sweetwater—Public Improvement—Caldwell & Co., Nashville, purchased \$750,000

bonds; \$800,000, water; \$100,000, sewer; \$50,000, street.

## Building and Loan Associations

Tex., Houston—Commonwealth Land & Development Co., capital \$48,000, chartered; R. E. Sullivan, John T. Boyle, L. H. Williams.

## New Financial Corporations

Ala., Gadsden—American National Bank of Gadsden, capital \$200,000, organized; J. B. Wadsworth, care of Etowah Trust & Savings Bank, correspondent; succeeds Etowah Trust & Savings Bank, Gadsden.

Mo., St. Louis—Plaza National Bank, Missouri Pacific Bldg., Olive Blvd. and Thirtieth St., capital \$300,000, opened; Julius W. Reinholdt, Jr., Pres.; Carl A. Reinholdt, Cashier.

Tenn., Columbia—Phoenix Trust Co., capital \$40,000, chartered; W. F. Anderson, F. D. Chaffin, J. Lem Thomas.

Tenn., Memphis—Fidelity Bond & Mortgage Co., 25 S. Second St., capital \$15,000, chartered; N. H. Taylor, J. H. Stone.

Tex., Aransas Pass—Munsill & Co., capital \$25,000, chartered; Gail B. Munsill, W. A. Cannon, James A. Harley; bonds.

Tex., Dallas—Tillery Finance Corp., capital \$20,000, chartered; J. L. and H. I. Tillery, W. G. Broyles.

Tex., Houston—W. S. Farish & Co., \$500,000, chartered; W. S. Farish, 10 Remington Lane; bonds.

Tex., Houston—Geophysical Finance Corp., capital \$23,000, chartered; C. S. Woods, Esperson Bldg.

Tex., Menard—Home Finance Co. organized; J. S. Slover, Pres.; Henry Findlay, Sec. 10-31

American Exchange National Bank, Nathan Adams, Pres., and City National Bank, J. A. Pondrom, Pres., both Dallas, Tex., merged, subject to approval of stockholders and comptroller of currency; combined deposits of about \$85,000,000; total resources \$110,000,000.

Baltimore Trust Co., Donald Symington, Pres., and Century Trust Co., Douglas Thomas, Pres., both Baltimore, Md., completed plans for merger, with resources of more

than \$100,000,000, and combined deposits of more than \$80,000,000; will be known as Baltimore Trust Co., with Douglas Thomas as executive V.-P.; former recently announced plans to increase capital stock, \$4,250,000 to \$6,250,000; will form securities company, with \$5,000,000 capital, in accordance with trend of trust company management.

Bank of Belton, S. E. Jerard, Pres., Belton, Mo., purchased Bank of Cleveland, G. W. Tilton, Pres., Cleveland, Mo.

Barnett National Bank of Cocoa, Don M. Barnett, Pres., Cocoa, Fla., opened with \$60,000 capital, surplus; C. J. Joiner, V. P. 10-24

Exchange National Bank, Ned Holman, V.-P., Tulsa, Okla., purchased Midland National Bank, J. B. Wilkinson, Pres., Midland, Tex., plans increasing capital \$75,000.

Fannin County Bank, Blue Ridge, Ga., J. M. Eaton, Pres., Tate, Ga., re-opened, with \$100,000 on which to operate.

Fidelity Building & Loan Assn., T. L. Bond, Sec., acquired Provident Building & Loan Assn. both Birmingham, Ala., to be operated as Fidelity Building & Loan Assn., 2112 First Ave.

First State Bank, F. J. Files, Pres., Hillsboro, Tex., acquired Abbot State Bank, which recently voluntarily closed its doors.

First National Bank & Trust Co., H. E. O'Bryant, Pres., Owensboro Banking Co., L. D. Ray, Pres., and Farmers and Traders Bk., Ben Wile, Pres., all Owensboro, Ky., plan merging as First-Owensboro Bank & Trust Co., located at Third & Frederica St.; will remodel building; branch of new bank at Second and Allen St.

First National Bank, John M. Monahan, Pres., Louisville, Ky., acquired Southern National Bank, B. M. Igo, Pres., Richmond, Ky.

Industrial Loan Bank, A. N. Peckham, Pres., Port Arthur, Tex., opened at 642 Proctor St. with \$50,000 capital; E. P. Baker, Treas. 9-26

Peoples Loan & Investment Co., Little Rock, Ark., increased capital to \$862,500.

Producers National Bank, T. J. Hartman, Pres., Tulsa, Okla., plans increasing capital, \$250,000 to \$550,000.

State Industrial Bank, Claude Kiser, Pres., and Central Industrial Bank, C. C. Hudson, Pres., both Greensboro, N. C., merged as State Industrial Bank, with \$300,000 capital and resources about \$2,500,000; Claude Kiser, Pres.; C. C. Hudson, Chm.

## \$1,000,000 ANNEX FOR BANK BUILDING IN DALLAS

Republic National Bank and Trust Company to Enlarge Structure

Dallas, Tex.—Construction is expected to begin within 30 days on an 18-story annex to the Republic National Bank and Trust Company's building here, according to W. O. Connor, chairman of the Board. No contracts have been awarded, but it is understood that work will start as soon as the building at 1305 Main street, on the site of which the annex will be erected, can be vacated by the Continental-Southland Savings and Loan Association. Construction is expected to be completed within a period of six months. The annex, which will cost about \$1,000,000, will give the bank a frontage on Main street of 150 feet and provide three complete floors for banking in addition to the present space, and two basements. The lobbies of both structures will be combined and five new elevators installed. The need of building the annex, it is said, is the result of the rapid expansion of the business of

the bank, which was enhanced by its recent consolidation with the North Texas National Bank.

## \$400,000 Bond Election Called

Corsicana, Tex.—The Corsicana City Commission has called an election for November 26 on a \$400,000 bond issue, to include \$275,000 for schools, \$50,000 for street improvements, \$30,000 for an incinerator, \$25,000 for a public market and \$20,000 for sewers.

## Louisiana Bank Resources Increase

Resources of all state banks, savings banks and trust companies of Louisiana increased about \$17,000,000 during the past year, according to the report of J. S. Brock, state bank commissioner. "That the growth of the banks has been a healthy one and along conservative lines is evidenced by the increase in deposits," he adds. Total deposits showed a gain of \$23,000,000 during the past year.

## \$400,000 Loan for State Institutions

Nashville, Tenn.—The state funding board is considering a loan of \$400,000 for buildings at two state institutions, including \$360,000 for the new administration building of the Central State Hospital for the Insane, this city, for which contract was awarded in the spring, and \$40,000 for a dormitory and classroom building at the Tullahoma Girls' Vocational School, for which contract was awarded a few weeks ago. Both projects were authorized by the last Legislature, and it is understood that the bonds, which will bear an interest rate of 5½ per cent, have been sold to Caldwell & Company, Nashville, at a premium of \$526.

Improvement bonds in the amount of \$846,000 have been sold by the city of Tampa, Fla., to C. W. McNear & Co., Chicago, and local banking houses, proceeds from the sale to be used to take up a similar amount of anticipation notes issued against the bonds.





## SOFT WATER SUPPLY FOR ST. PETERSBURG, FLA.

Construction Under Way on Project  
Estimated to Cost \$3,000,000

St. Petersburg, Fla.—To insure this city an abundant supply of soft water from the Cosme-Odesa area in the lake region northwest of Tampa and about 35 miles northeast of St. Petersburg \$3,000,000 is being expended for wells, pipe lines, pumping station and auxiliary facilities. For years the city has faced a serious water problem, the supply obtained from local wells at or near sea level being very hard and salty. Thus, for a long time plans have been considered for obtaining a soft potable water suitable for both domestic and commercial purposes.

In this connection the J. B. McCrary Co., Atlanta, Ga., recently received a contract from the Pinellas Water Co. for developing a 10,000,000 to 20,000,000 gallon soft water supply. It is planned to sink a group of 15 wells scattered over a large area in the lake region and to pump water a distance of 30 miles through a 36-inch force main to the city. About six miles of 16-inch to 24-inch cast iron pipe gathering lines will connect the several wells and convey the water to a central pumping station where it will be aerated and then pumped to St. Petersburg. The force main will be a concrete pipe, lined with steel, the wall thickness of the pipe to be about four inches. At the city end of the force main about five miles of 16-inch to 24-inch cast iron pipe will be laid to proper distributing points in the present St. Petersburg system.

The Pinellas Water Co. will sell the water under pressure at the city gates, and it will be distributed through the municipally owned system. This water supply contract was effected after more than two years investigation on the part of the commissioners of the city with the assistance of 25 representative citizens. The adoption of the plan now being carried out is a result of careful investigations on the part of the Layne-Southeastern Co., Norfolk, Va., under the direction of R. R. Schweitzer, cooperating with the J. B. McCrary Co., which work was handled by A. P. McCrary. Work will be vigorously pushed by a large construction force with a view to completing the project within 10 months. The project is financed through the American Equities Co. of New York.

### New Texas Cannery

Natalia, Tex.—The Medina Valley Growers Association has pledged its support and necessary acreage for the establishment of a cannery here, which is expected to be ready to take care of the

spring crop of tomatoes and beans. A site has been selected and the plant will be erected and operated by the Griggs Canneries of Indiana, with D. F. Stoy, vice-president, in charge of the local plant. Railway sidings will be provided for the use of the plant, which will employ approximately 125 operatives.

## German Equipment Displacing American Sales in Mexico

American manufacturers of various kinds of machinery and equipment who built up a large trade in Mexico during the years immediately following the World War now find themselves being rapidly displaced by German manufacturers, it is announced. Inroads of German-made mining, agricultural and road construction machinery the past several months are especially noticeable in the trade reports of Mexico. It is asserted that American manufacturers and dealers have lost to a great extent the position they gained in Mexico dur-

ing the post-war period and that Germany has re-established its former place as the leading nation in the machinery and equipment trade of Mexico. Also that many American-owned mines are now closed down and there is little doing in the way of purchase and installation of new machinery in those in operation. German interests have been active in acquiring mining properties of late, especially in the states of Jalisco and Durango, and they are naturally giving preference to goods of German manufacture. This is also true of Mexican mine owners.

## Better Demand for Farm Land

Atlanta, Ga.—Improvement is noted in the demand for farm lands in Georgia and throughout the Southeast as in many other sections of the country, according to bankers and farm land developers here. This is said to be in line with views of presidents of several Federal Farm Land banks who recently held a conference in Washington.

## Engineering Research Program at Alabama Polytechnic Institute

By P. O. DAVIS, Auburn, Ala.

A comprehensive program of research work, designed to be of maximum service to the people of Alabama and to the South, has been started by the engineering research station of the Alabama Polytechnic Institute, Auburn. Upon recommendation of President Bradford Knapp the program was approved by the board of trustees in February of this year, and now 12 projects are under way, according to Dean John J. Wilmore of the school of engineering, who is acting director of the engineering research station. Title and purpose of each project are as follows:

Project No. 1.—Corrosion of Metals Due to Electrolytic Action Induced by Moving Water. Purpose: To investigate the relation of electrolytic currents to the corrosion of metals.

Project No. 2.—Pitting Effect of Moving Water on Metals. Purpose: To find a fundamental basis or theory to explain some peculiar pitting effects observed.

Project No. 3.—Investigation of Stresses in a Reinforced Concrete Building. Purpose: To check, in a large building now being erected, the relation between calculated stresses and deflections, and to measure the actual stresses while the building is going up and afterward.

Project No. 4.—Manufacture of Xylose from Cotton Seed Hulls, Peanut Hulls, and other Waste Products. Purpose: To produce on a commercial scale a valu-

able product from low grade materials.

Project No. 5.—Utilization of the Residue After Extraction of Xylose from Cotton Seed Hulls. Purpose: To convert waste material into useful products.

Projects No. 6.—Utilization of Residue for Feed and Fertilizer. Purpose: To convert waste material into useful products.

Project No. 7.—Reduction of Cost of Manufacture of Xylose. Purpose: To find cheaper methods of production.

Project No. 8.—A Study of the Economic Factors of the Manufacture of Xylose from Agricultural Wastes. Purpose: To make a survey of costs of manufacture, cost of raw materials and other economic factors concerned.

Project No. 9.—Utilization of Agricultural Wastes for Fuels and Other Commercial Purposes. Purpose: To convert waste material into useful products.

Project No. 10.—Utilization of Xylose. Purpose: To discover commercial uses for xylose and to develop methods of manufacture.

Project No. 11.—A study of the Composition and Use of Plastic Materials and the Best Methods of Working. Purpose: To cooperate with the Industrial Arts Department in a study of plastic materials and methods of working them in machine and in dies under pressure.

Project No. 12.—A Study of Highway Traffic. Purpose: To make a study of traffic conditions in this section and determine if possible the most efficient speed under average conditions.



## URGES BUILDING AUTHORIZED ROAD PROJECTS PROMPTLY

Observer Sees Motor Transportation Hampered Due to Failure to Push Programs Vigorously

By E. E. DUFFY.

Improved highways are so badly needed that every possible expedient should be taken to keep road building machinery in action. One of the leading difficulties encountered in the war on mud, dust and friction is nothing more than that human quality which inspired Benjamin Franklin to urge, "Never put off until tomorrow what you can do today."

Plans for highway betterments in themselves do not save the motorist gas, or wear and tear on his car. No comfort is brought to the motorist at least until he hears that the contract for the contemplated project has been let. In a day's ride one may pass through dozens of communities, each with a long planned pet project for which finances are available, and yet no constructive action taken.

It is with pleasure that the action of the Minnesota State Highway Department is viewed. Bids for contracts on 136 miles of pavement are now being received. This pavement is not to be built until 1930, but the contracts are

being placed now—and just so much routine work is out of the way.

Early letting of road contracts brings with it manifold benefits: the contractor has ample time to make his plans; road machinery can be placed in operation at the crack of dawn on the first suitable day; costly delays are eliminated and full advantage can be taken of the all too short roadbuilding season; and the citizen feels his tax money will soon be at work for him.

## New Strawberry Variety for North Carolina

A new variety of strawberry, the Blakemore, will be introduced this winter in the coastal plain section of North Carolina by the United States Department of Agriculture in cooperation with the North Carolina coastal plain test farm at Willard, N. C. It is a cross of the Missionary and Howard 17, and shows a number of the good characters of each parent.

## Architects for Municipal Center

Washington, D. C.—Four architects with membership in Allied Architects of Washington, Inc., will be employed individually to aid in preparation of plans for the new municipal center, according to A. L. Harris, municipal architect. These members include Edward C.

Downs, Nathan C. Wyeth, Fred V. Murphy and George Burnep. Congress has appropriated \$10,000 for drawing tentative plans.

## \$500,000 FOR SEWER AND WATER FACILITIES

Construction to Start on Improvements at Sweetwater, Tex.

More than \$500,000 is involved in contracts for improvements to water works and sewer facilities at Sweetwater, Tex., of which S. H. Bothwell is city manager. The Womack-Henning Construction Co., Sherman, has contract at \$345,866 for a 15,000 acre-foot reservoir, a 3000-foot earth dam with concrete spillway and appurtenances. The Standard Paving Co., Fort Worth, is to construct a 1,000,000 gallon filtration plant extension at a cost of \$41,220. Robeck & Humphries, Omaha, Nebraska, will build a \$51,966 sewage disposal plant and sewer mains and laterals at a cost of \$27,688 under separate contracts. W. L. Supulver, Sweetwater, is contractor for water mains and laterals at \$4705. A 750,000-gallon elevated water tank of Pittsburgh-Des Moines Steel Company design is to be erected by the Vedder Construction Co., Sweetwater, at a cost of \$44,750. For the sewer main and water main work the city is to furnish the pipe and fittings, all other materials to be provided by the contractors. The awards for this work were made on October 28.



BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS



# PROPOSALS

Bids close November 21, 1929.

War Department, office Constructing Quartermaster, Fort Bragg, N. C. Sealed proposals in triplicate will be received until 10 A. M. November 21, 1929, and then publicly opened, for the construction and completion of Four (4) Field Officers' and Ten (10) Company Officers' quarters at Fort Bragg, North Carolina. \$25.00 deposit, certified check, payable to Treasurer of United States, required for drawings, etc. Further information on request.

Bids close December 10, 1929.

TREASURY DEPARTMENT, office of the Supervising Architect, Washington, D. C., November 7, 1929.—SEALED BIDS will be opened in this office at 3 P. M., December 10, 1929, for construction of the U. S. Post Office at Hartsville, S. C. Drawings and specifications, not exceeding six sets, may be obtained at this office in the discretion of the Supervising Architect by any satisfactory general contractor, and provided a deposit is made of \$15.00 for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. JAS. A. WETMORE, Acting Supervising Architect.

## GENERAL INFORMATION

### About Proposal Advertising in Manufacturers Record

PUBLICATION DAY: Thursday.

FORMS CLOSE: 10 A. M. Tuesday.

When too late to send copy by regular mail to reach us by 10 A. M. Tuesday, forward by night letter or air mail when possible.

### THE DAILY BULLETIN OF THE MANUFACTURERS RECORD:

Published every business day, gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened or when daily insertions are necessary to meet legal requirements.

The rate is the same for both publications—35 cents a line each insertion.

Bids close December 4, 1929.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., November 11, 1929.—SEALED PROPOSALS will be opened in this office at 3 P. M., December 4, 1929, for furnishing all labor and material necessary for the installation of a fire alarm system, watchman's report and time recording system, and a time clock and dismissal system in the Internal Revenue Building (Building, Bureau of Internal Revenue), Washington, D. C. All prospective bidders are hereby notified that any bid submitted in response to this advertisement must be accompanied by a statement of facts in detail of the business and technical organization of the bidder available for the contemplated work, including financial resources and building experience, etc. The United States expressly reserves the right to reject any bid in which the facts as to business and technical organization, financial resources, or building experience compared with the project bid upon, justify such rejection. Especial attention is called to the fact that the right is reserved to consider both time for completion as well as price in awarding the contract. The successful bidder will be required to furnish a performance bond of 50% of the contract price. Drawings and specifications may be obtained from this office. JAS. A. WETMORE, Acting Supervising Architect.

Bids close November 19, 1929.

### \$225,000 5% Bonds

Laredo, Texas.  
Sealed bids for the purchase of \$225,000.00 City of Laredo, Texas, Independent School District Bonds, five per cent interest, payable semi-annually, due serially over a period of forty years, with redemption option after twenty years, will be received and opened at regular City Council meeting, Tuesday, November 19, 1929, at 7.30 o'clock P. M. All bids must be accompanied by Cashier's check or certified check for \$5000.00, payable to J. A. Ortiz, City Treasurer, which will be forfeited as liquidated damages if successful bidder fails to comply with purchase. Particulars may be obtained from A. R. Garcia, City Secretary. City reserves right to reject any and all bids. Bonds dated November 1, 1929.

Witness my hand October 19, 1929.  
ALBERT MARTIN, Mayor,  
City of Laredo, Texas.

Bids close November 19, 1929.

### State Highway

DEPARTMENT OF PUBLIC WORKS  
STATE OF MARYLAND  
STATE ROADS COMMISSION

#### NOTICE TO CONTRACTORS

Baltimore, Md.  
SEALED PROPOSALS for BUILDING ONE SECTION OF STATE HIGHWAY AS FOLLOWS:

Baltimore County, Cont. B-102. One section of State Highway along the Frederick Road from the Baltimore City Line to Bishop's Lane, a distance of 1.01 miles. (Concrete combination curb and gutter and drainage.)

will be received by the State Roads Commission, at its offices, Federal Reserve Bank Building, Calvert and Lexington Sts., Baltimore, Maryland, until 12 M. on the 19th day of November, 1929, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 7th day of November, 1929.

G. CLINTON UHL, Chairman.  
L. H. STEUART, Secretary.

Bids close December 14, 1929.

U. S. Engineer Office, Wilmington, North Carolina. Sealed bids, in duplicate, will be received until 12 o'clock noon, December 14, 1929, and then publicly opened, for furnishing all labor and materials for the construction of a highway bridge across the Intracoastal Waterway from Beaufort to Cape Fear River, N. C. Information upon application.

Bids close November 21, 1929.

### Concrete Bridge

Norfolk, Virginia.

Sealed proposals will be received at the office of the Director of Public Works, City of Norfolk, Va., until 12 o'clock noon November 21, 1929, for the construction of a concrete bridge across Lafayette River at Granby Street complete, except the steel lift span and asphalt surfacing. The contract will include approximately:

1300 Piles (80,000 Lin. Ft.)  
450 Lin. Ft. of Steel Caissons.  
4500 Cu. Yds. of Concrete  
1550 Lin. Ft. of Concrete Balustrade  
Pile and Timber Fenders for Lift Span

together with the removal of old timber bridge and swing draw after completion of the new bridge.

Plans and specifications, together with Proposal, Contract and Bond forms, may be had at the above office upon deposit of \$10.00, which will be refunded if plans and forms are returned on or before the bid date.

Each bid must be accompanied by a Proposal Bond, or a certified check, payable to B. Gray Tunstall, City Treasurer, in the sum of Ten Thousand Dollars. Out-of-town bidders should also submit data as to their equipment and ability to perform the work, financially and otherwise.

The City of Norfolk reserves the right to reject any or all bids or to accept any proposal considered of advantage to the city.

WALTER H. TAYLOR, 3RD,  
Director of Public Works.

Bids close December 10, 1929.

### Notice To Contractors

Postponement of Opening Bids: Previously advertised to be opened November 5, 1929.

Baton Rouge, La.

Notice is hereby given by the Louisiana Highway Commission, Louisiana National Bank Building, Baton Rouge, Louisiana, that the date for receiving bids for construction of the projects listed below has been postponed from 11 A. M. November 5, 1929, to

11 A. M. Tuesday, December 10, 1929.

PROJECT 5251, MANY-FLORIEN HIGHWAY, Sabine Parish, Route No. 42. Length 8.1 miles. Concrete pavement.

PROJECT 1151, OBERLIN-KINDER HIGHWAY, Allen Parish, Route No. 24. Length 7.0 miles. Concrete Pavement.

HARRY B. HENDERLITE,  
State Highway Engineer.  
O. K. ALLEN, Chairman,  
Louisiana Highway Commission.

Bids close November 25, 1929.

### Materials For Sewer System

Houma, La.

SEALED BIDS will be received by the city of Houma, Louisiana, sewerage district No. 1, until 10 o'clock A. M., November 25th, 1929, for the purchase by said city of material entering into the construction of a sanitary sewer system. Material to be purchased consists of sewer pipe, manhole rings and covers, cleanout castings, etc. All bids must be addressed to Dreux Angers, Clerk, Houma, Louisiana. Usual rights reserved. Further information may be had by addressing Dreux Angers, Clerk, Houma, Louisiana, or Municipal Engineering Company, Athletic Club Bldg., Dallas, Texas.

Bids close November 25, 1929.

### Jail Alterations and Additions

Bonifay, Fla.

Sealed proposals endorsed "Proposals for alterations and additions to Holmes County Jail, Bonifay, Florida," addressed to the Board of County Commissioners of said county, will be received at the office of J. W. Vanlandingham, Clerk of the Circuit Court, Bonifay, Florida, until ten o'clock A. M. on Monday, November 25, 1929.

Plans and specifications of the above work may be obtained at the office of W. D. Willis, Architect, 517 Blount Building, Pensacola, Florida, on deposit of \$15.00 for each set of plans.

Each bid must be accompanied by a certified check for \$750.00, made payable to the Board of County Commissioners of said county.

The successful bidder will be required to give bond for the faithful performance of his contract in a sum equal to fifty per cent of the amount of his contract price in a surety company authorized to do business in the State of Florida in full compliance with the Statutes of the State of Florida.

The Board of County Commissioners reserves the right to reject any and all bids or parts thereof.

BOARD OF COUNTY COMMISSIONERS  
OF HOLMES COUNTY, FLORIDA.

By J. J. WILLIAMS, Chairman.

Attest:  
J. W. VANLANDINGHAM, Clerk.

## CLASSIFIED OPPORTUNITIES

### MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

FOR SALE—10,000 Acres Oil Land in Louisiana. Leased for six years at \$1.00 per acre yearly. Payable yearly in advance. Price \$60,000.00.  
J. C. HARRISON & CO., Clarksville, Ark.

FOR SALE—Several tracts of mineral rights. Have one tract of 16,000 acres, another of 715 acres, which have been core-drilled and open pitted. Our geological report gives 240,000,000 tons of Rock Asphalt on the large tract and 4,000,000 tons on the small tract. For complete data address  
W. P. HARLEY, Bowling Green, Ky.

#### CLAY PRODUCTS

FOR SALE—Major clay products plant site, on the Gulf Coast, near New Orleans. Ample, tested, imperishable mineral materials, for making good red common brick, face brick, tile, piping and building wares. Favorable transportation facilities give territory control. Get Booklet.  
OWNER, Box 24, Warrior, Ala.

### Rates, Terms and Conditions

RATES: 30 cents a line each insertion. Minimum space accepted, four lines. In estimating the cost allow six or seven words of ordinary length to a line. When the advertisement contains a number of long words proper allowance should be made.

#### Rates for Special Contract

100 lines 25c a line  
300 lines 25c a line  
500 lines or more 25c a line

TERMS: For transient advertising cash with order; check, postoffice or express money order or stamps accepted.

On special contract advertising bills are rendered monthly, covering space used each month, payable within ten days.

CONDITIONS: No patent medicine, oil or mining stock advertisements or questionable or undesirable advertisements will be accepted. The assistance of our readers in excluding undesirable advertisements is requested. No display type used.

### FARM, FRUIT AND TRUCK LANDS

#### FLORIDA

FOR SALE—An Island in the St. Johns River near DeLand, Florida; 1436 acres; 35 acres in grove, part bearing. Quite isolated from storms and freezes. Good year-around climate, fishing and hunting. Lots of timber. Will consider party or parties to join me in 200-acre orange and grapefruit grove. Land adapted to raising nice bright fruit.  
P. O. Box No. 457, Jacksonville, Florida.

#### GEORGIA

WANTED—CASH OFFER for 3863-acre, well-improved farm that Loan Company has appraised at \$135,820.00, without cotton gin machinery. Two-story, eleven-room main dwelling, superintendent's six-room dwelling, plenty tenant houses; operate eighty single farms. Turnpike road and electric power line through and railroad station on place. Seven miles county seat. Ogeechee River southern boundary. Would also make ideal stock farm or game preserve.  
T. Z. DANIEL, Millen, Ga.



## FARM, FRUIT AND TRUCK LANDS

## MISSOURI

ACRES, 240, unimproved valley land, clear, for Florida or Eastern land or property, clear.

D. R. HOUCK, Rich Hill, Mo.

## SOUTH CAROLINA

FOR SALE—Large and small farms, hunting preserves, etc. Iodine content high in food products. Investors' and farmers' opportunity to buy at sacrifice prices.

BOX 15, SUMTER, S. C.

## ISLAND, LAND AND TIMBER

For Sale—Four thousand acre island, twenty-one hundred high, one thousand cleared, fine truck land. Island abounds with deer, quail and other game; duck pond, high bluffs, several beautiful old homesites. Located on South Carolina coast; also other salt-water frontage, cut-over lands and timber. J. W. BARNES, Mendel Building, Savannah, Ga.

## TENNESSEE

14,500 ACRES. Special price \$110,000. Positively the GREATEST BARGAIN IN EAST TENNESSEE. Good title. Situated on Tenn. Cent. R. R. and on Alvin C. York Highway from Louisville to Chattanooga. One mile from the fast growing town of Crossville, Tenn. Underlaid with Nelson and Sewanee seams of coal, also a real hay, grass and stock proposition. Well watered; cattle and sheep grow 10 months in the year on native grasses. Raise potatoes; average yield, 150 bushels per acre, netted \$1.56 per bushel this year. Can be subdivided and sold in small farms, having frontage on hard surfaced highway. Must be sold to close estates. Warranty deed. Terms one-third cash, balance 1 and 2 years. Other small tracts. E. H. BENOIST, 1006 Title Guaranty Building, St. Louis, Mo.

## VIRGINIA

VIRGINIA COUNTRY ESTATES—Write for new illustrated free catalogue of handsome Virginia Country places, hunting preserves and stock and grain farms. GEO. V. VENABLE & CO., Lynchburg, Va.

## SOUTHERN ESTATE

CHARLOTTESVILLE, VA., near Farmington Country Club. FOR SALE—A wonderful homesite, on the Jefferson Highway, just west of the University of Virginia. 100 acres, embracing a beautiful hill, from the top of which is a marvelous panoramic view of the Blue Ridge Mountains and the picturesquely rolling Piedmont country. City water and electricity. The surroundings are ideal and include some of the most distinguished country estates of Albemarle County. This property was formerly owned by Chief Justice Marshall. E. W. MOSS, Owner, Charlottesville, Va.

## REAL ESTATE—MISCELLANEOUS

OUR RENTAL DEPARTMENT has some real furnished houses for season's rent. Wire or write your reservation. P. JOHN HART REALTY & INVESTMENT CORP., Fort Myers, Florida.

## BUSINESS AND INVESTMENT PROPERTIES

A REAL INVESTMENT—Lot with 228 feet on main business street; has double street frontage, with best corner in that part of city; has 6 small business rooms, 5 of which have been rented continuously. For quick sale \$16,000.00. P. John Hart Realty & Investment Corp., Fort Myers, Florida.

AFTER TWENTY YEARS, my health has failed and I must quit now. Offer entire outfit, consisting of 2 1/4 acres, six-room dwelling, garage, chicken houses, barn, two-story storehouse, stock of general merchandise; located in heart of mfg. district; no competition. Has water, lights, sidewalk; adjoins Southern Ry., side track, convenient. On a corner lot; an ideal home and business location, with every reason for enhancing in value. An ideal opening for a boarding house, also a service station. Property is bound to increase in value, as the only and best factory site is on opposite side of street. Terms, part cash. Don't write unless you have some money and mean business.

K. E. FINCANNON, Morganton, N. C.

## BUSINESS OPPORTUNITIES

WE HAVE CLIENT who wants someone to build rooming house; will lease or buy if on proper terms. P. JOHN HART REALTY & INVESTMENT CORP., Fort Myers, Fla.

LONG TERM LOANS, large amounts, made on industrial, mercantile, sawmill properties. THOS. W. GILMER, Attorney, Bay Minette, Alabama.

WANTED—Party to invest in fireproof hotel on Boardwalk. Economical and profitable. Address A. FOLGER SNOW, care Hotel Morgan, Daytona Beach, Fla.

PARTIES QUALIFYING can join a Washington, D. C., Inc. Manufacturing Co. as a State director without any cash advance for director service stock interest. No. 8020, care Manufacturers Record.

WRITE FOR OUR BULLETIN NO. 1—Listing machines and auxiliary equipment for making thin shell hollow tile by heating poured (cast) cement at average cost of 4 cents for standard fireproofing sizes. THE PAULY MANUFACTURING CO., 1333 K Northwest, Washington, D. C.

FOR SALE—Agricultural lime business. Large deposit and fully equipped plant on railroad in rich agricultural section. In successful operation over ten years. Going concern, with established trade over large territory. Nice business to handle. For details address No. 8009, care Manufacturers Record, Baltimore, Md.

FOR SALE—Half interest in washed gravel proposition on a clear creek on main line railroad. Good market, with favorable freight rate. Finest grade washed gravel and sand. Owner not able to finance and will sell half interest to party who can finance a 10 or 12-inch pumping plant. Address No. 8022, care Manufacturers Record.

## CAPITAL WANTED

## FOR SALE

Hydro Electric Project undeveloped, incorporated, special condemnation rights. Options for needed lands. Engineers report shows installed H. P. 3500 at a cost of \$110. 30 ft. dam with 80 ft. dam possibility. Will be interested in capital to develop. Power can be sold now. Interest rate must be attractive and on annual reduction plan. W. P. Baldwin, Laurens, S. C.

## AUCTION SALE

FOR SALE—Public Auction Sale of TWO LARGE WATER POWER PLANTS, Thursday afternoon December 12th, 1929, at three o'clock on the premises, rain or shine at PETERSBURG, VIRGINIA.

Fronting on the Appomattox River, opposite the Jno N. Stearns & Co. Silk Mills, near the Norfolk & Western R. R. at Campbells Bridge, Fleet St., on the County side of the river, known as the Eanes Planing Mills, consisting of Two Water Power Plants, which under proper installation of wheels, should develop about 187.50 H. P.

This sale affords an opportunity to acquire a manufacturing site with water power and almost unexcelled railroad (three main trunk lines) and water shipping facilities.

This property is being sold for a division, regardless of the price.

Terms—10% on day of sale; 40% in twenty days thereafter, balance three or five years at 6% on mortgage.

J. R. Harrison, Auctioneer, Petersburg, Virginia.

## DEVELOPING AND ENGINEERING

## ORGANIZING—DEVELOPING—ENGINEERING

Engineering firm, widely experienced in investigating, organizing, developing, designing and supervising construction, solicit correspondence regarding development or extension of meritorious projects and existing industries, power plants and utilities. Address No. 8016, care Manufacturers Record.

## INDUSTRIAL ENGINEERS

PLANS, SPECIFICATIONS and details covering installation of equipment at reasonable rates. Specialists in bakery, laundry and garage design. Write fully to EDWARD R. CARROLL CO., Industrial Engineers, 209 Cotton Exchange Building, Houston, Texas.

## INDUSTRIAL SURVEYS

ENGINEERING REPORTS on resources of cities and towns. Recommendations for industrial development and zoning made by specialists in locating industries.

TECHNICAL SERVICE CO., Woolworth Building, New York City

## INDUSTRIAL PLANTS

## FOR SALE

Iron and Brass Foundry. Live town of 7000. No competition. Doing good business but must sell on account of illness. Cash or terms. A bargain for someone. Address P. O. BOX 217, CLOQUET, MICH.

## IODINE IN VEGETABLES

Splendidly built brick packing plant available for lease or purchase in section where analyses show high iodine content in food-stuff grown. Particulars sent upon request. P. O. Box 134, Orangeburg, South Carolina.

## EXTREME SACRIFICE

Strictly modern one-story Manufacturing Plant at Kokomo, Indiana; 200,000 sq. ft. floor space; all daylight; sprinklered; track. Beautiful administration building. Wonderful buy at unbelievably low price. Get particulars quick.

FANTUS FACTORY LOCATING SERVICE, 139 N. Clark St., Chicago.

## MANUFACTURING PLANT TO LEASE

Located in heart of Carolinas' textile industries. All kinds finished goods obtainable. Bleaching and finishing plant next door. Forty thousand square feet floor space, sprinkler system, steam heat, side track, low insurance rates, low taxes. Address J. W. ANDERSON, Rock Hill, S. C.

## SOUTHERN COTTON MILL

## For Sale

## 8000 SPINDLES

## GOOD WATER POWER

## Address

F. C. ABBOTT & COMPANY,

201 Johnston Building, Charlotte, N. C.

FOR SALE—Modern woodworking or flooring plant at Winchester, Ky. Main building 90x200 ft., separate brick boiler and engine room; storage building 20x100 ft.; four dry kilns, each 20x100 ft. Plant equipped with two 150 H. P. boilers, one 250 H. P. Corliss engine electric generating plant, deep well pump, storage tank, line shafting, 800 ft. railroad, switch, storage dock, separate office building, four and half acres of ground, low tax rate, efficient and cheap labor, abundance of raw material close by. Price very low. Kentucky Flooring Co., Orange, Va.

## FACTORY BUILDINGS

## FOR SALE OR RENT

Factory 50x192, 3-story, cement construction, well lighted, on L. & N. Railroad and power line. For details write CARL A. SWANTROM, Summerdale, Ala.

FOR SALE—Brick factory building, 10,000 square feet floor space. Equipped with boiler, engine, radiators, lights and plumbing. Desirable location. Address H. A. VESTAL, Athens, Tennessee.

FOR SALE—Modern Factory Building, in Staunton, Virginia, principal city of the Shenandoah Valley. Brick construction, large space for expansion, centrally located, 24,251 feet floor space. Terms to suit. Apply RUCKMAN & JOHNSON, Real Estate Brokers, STAUNTON, VIRGINIA.

## PATENTS

MANUFACTURERS—Write for our FREE Classification Sheets of inventions for sale, covering 135 main subjects, and in one or more of which you will doubtless be interested. ADAM FISHER MFG. CO., 578 Enright, St. Louis, Mo.

## PATENT ATTORNEYS

EDWARD C. SASNETT, Attorney at Law and a former Principal Examiner in the United States Patent Office, 550 McGill Building, Washington, D. C.

FREE "PATENT PARTICULARS" Sterling Buck, over 23 years Registered Patent Attorney. Prompt and thorough services. Suite M 629 F, Washington, D. C.

PATENTS—Booklet free. Highest references. Best results. Promptness assured. WATSON E. COLEMAN, Patent Lawyer, 724 Ninth St., N. W., Washington, D. C.

PATENTS—TRADEMARKS—COPYRIGHTS Charlotte office convenient to South. PAUL B. EATON, Registered Patent Attorney, 218 Johnson Building, Charlotte, N. C., and 314 McLachlen Bldg., Washington, D. C.

SEYMOUR & BRIGHT, Registered Patent Attorneys. Established 1876. PATENTS, TRADEMARKS, COPYRIGHTS. Prompt and thorough service. Suite 600-4, Barrister Building, Washington, D. C.

## AGENCIES WANTED

MANUFACTURERS of merchandise of merit, desiring Southern representative, please communicate with and outline proposition fully to J. R. JOHNSTON, 738 Power Building, Chattanooga, Tenn.

## AGENCIES WANTED

WANTED—Three or four additional manufacturers lines of building materials or specialties for a newly opened manufacturers agency. Well acquainted with architects and contractors and represent several nationally known and advertised building products. Signed: JOHN WILLIAMS COMPANY, Room 722 Stahlman Building, Nashville, Tenn.

## SITUATIONS WANTED

EXPERIENCED Southern corporation secretary in textiles machinery, finance, seeks work. Technically educated. Satisfactory references submitted and personal details. Address No. 8023 care Manufacturers Record, Baltimore, Md.

RECENT COLLEGE GRADUATE and experienced construction engineer, now employed, desires change. Prefer with contractor or firm engaged along construction lines. Foreign fields solicited. Address No. 8024, care of Manufacturers Record.

## MACHINERY AND SUPPLIES

FOR SALE—One hundred thousand gallon steel reservoir, electric japanning oven, woodworking machinery, exhaust fans, dry kilns. J. W. ANDERSON, Rock Hill, S. C.

## MEN WANTED

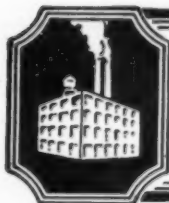
IF YOU ARE OPEN to overtures for new connection and qualified for a salary between \$2500 and \$25,000, your response to this announcement is invited. The undersigned provides a thoroughly organized service, of recognized standards and reputation, through which preliminaries are negotiated confidentially for positions of the caliber indicated. The procedure is individualized to each client's personal requirements, your identity covered and present position protected. Established nineteen years. Send only name and address for details.

R. W. BIXBY, INC.,  
103 Downtown Bldg. Buffalo, New York.

## LUMBER

## FOR SALE

Second-Hand Pine Lumber, Sound and Dry  
300,000 feet 2x 4x6' to 14' long  
1,000,000 feet 2x 6x8' to 16' long  
55,000 feet 2x 8x8' to 24' long  
500,000 feet 2x10x8' to 16' long  
75,000 feet 2x12x8' to 24' long  
50,000 feet 1x 6x4' to 12' long  
Also limited amount of same sizes in shorter lengths—4 to 6'. Write for prices.  
CAROLINA MOTOR SPEEDWAY,  
Box 1168, Charlotte, North Carolina.



## SPECIAL ADVERTISEMENTS OF GENERAL INTEREST



### Industrial and Commercial Sites

in and around

CHATTANOOGA, TENNESSEE

*We will be glad to serve you*

**BROWN & CO., Inc.**

#11 East 8th Street

Chattanooga, Tenn.

### BOAT BUILDING BUSINESS FOR SALE

Must be sold on account of liquidation. A going business including all machinery, necessary materials and good stock of completed boats on hand.

Company has been constructing Race Boats and Family Runabouts and holds National Reputation for its product.

Also long time lease on building of 30,000 sq. ft. floor space.

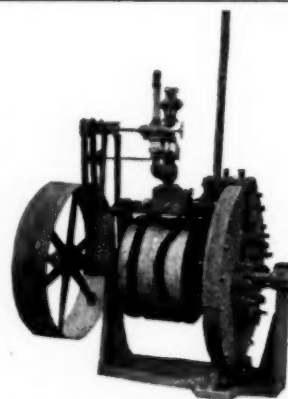
An unusual opportunity.

Write for full particulars.

**JOHN L. HAMMER, Receiver**

Box No. 42

Wilmington, N. C.



### FOR SALE

#### Improved Reversible Rotary Steam Engine

Can be used as a pump or compressor. The cylinder illustrated is 36 inches in diameter and 2 inches deep. The rotor or piston is 20 inches in diameter and 2 inches thick. The two valves are handled with a cam and the cylinder has metal packing rings, making it steam, water and air tight. The pump can be made from one foot to 10 or 12 feet in diameter. For further particulars write to

**C. R. Reid, Heidelberg, Miss.**

### Sale of Heading Mill Machinery

On Monday, November 25, 1929, at noon, at Winton, N. C., W. D. Boone, Trustee, will offer for sale the heading mill and machinery of the Winton Heading Company, consisting of engines, saws, boilers, dry kilns, etc. Mill complete will be offered, and then mill and mill site combined will be offered.

### SELL THAT IDLE MACHINERY

Tell our readers about it through

**THE RESALE DEPARTMENT**

it may just suit the needs of someone.

Ask for rates

**MANUFACTURERS RECORD, BALTIMORE, MD.**